"No One Wants to be a Loser:" High School Students' Perceptions of Academic Competition

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This study sought to explore the often controversial role of competition in academic settings by interviewing 11 high school students, about half of whom were in an AP English course. The interviews asked the students to describe how they feel competition plays a role in their classrooms and personal learning experiences, and also how competition has influenced their motivation and achievement-related outcomes. Results indicated that all students had engaged in competition academically and it was viewed both positively and negatively, despite the fact that students' description of specific experiences with competition were largely negative. Four dominant patterns emerged that depended on the combination of students' perceived competence about the task and the stakes involved. Perceptions of these either led students to disengage from the competition, diminish the importance of the competition, stress about it, or enjoy it.

Introduction

Competition is a common occurrence in everyday life. People compete with one another, and at times with themselves, in realms such as sports, politics, business, relationships, and social media activity. Although nearly ubiquitous in society, the presence and role of interpersonal competition in academic settings can be controversial (Tauer & Harackiewicz, 2004). Certainly, competition happens at every level of education in various ways, from teachers posting "best work" on classroom walls, to classes playing review games to prepare for tests, to more high stakes competitions such as competing for valedictorian or admission to college. From a behaviorist perspective, these types of competition could be considered a source of motivation driving the effort toward the reward of winning the competition. A social perspective may suggest that competition serves as a social link to increase students' sense of belonging and therefore contributes to motivation (Bergen, 2016). Other contemporary theories of motivation suggest that academic competition may undermine student motivation and subsequent achievement, particularly by shifting the focus to "winning" instead of the intrinsic value of the task (e.g., Epstein & Harackiewicz, 1992; Tauer & Harackiewicz, 2004). The extent to which competition is or is not effective in motivating learning and the unintended consequences of competitive academic environments are issues in need of greater understanding.

This study explores how high school students think and feel about the presence of academic competition within their schools. Investigating how students perceive and react to academic competition has implications for helping motivate students and for informing the practice of teachers in schools.

For the purposes of this study, achievement goal theory is used as the framework for understanding the potential consequences of competition on motivation and achievement.

Achievement goal theory emerged as educational psychologists became interested in students' responses to failure and overall orientations towards learning (Ames, 1984; Ames & Archer, 1988; Dweck, 1986; Nicholls, 1984). Patterns of adaptive and maladaptive goal orientations were identified based on reasons that people pursued various goals and have been studied extensively.

The simplest form of achievement goal theory suggests that students are generally disposed to pursue either mastery goals (sometimes referred to as learning or task goals) or performance goals (ego goals). Later developments to the theory included the distinction between approach and avoidance orientations, particularly for performance goals (Elliot, 1999; Elliot & Harackiewicz, 1996). An approach orientation represents the motivation to work towards a desired outcome, whether it be to demonstrate competence (in the case of performance goals) or to improve skills and proficiency (in the case of mastery goals). An avoidance orientation represents the desire to avert failure, therefore, those with avoidance orientations will take fewer risks and put their efforts towards avoiding situations where they may show incompetence in front of others (in the case of performance goals) or may find themselves unable to learn something new or losing the skills they already have (in the case of mastery goals).

Korn and Elliot (2016) proposed another revision of the theory in which goal orientations are also explained as having different *standpoints* and *standards* of competence. One's view of competence is their *standpoint* (demonstration or development), whereas one's evaluation of competence is their *standard* (others or criteria of the task and self). The standpoint of a performance-approach goal is characterized as viewing competence as the ability to demonstrate skills to the standard of a positive evaluation of others based on a norm. Performance goals (especially performance-avoidance goals) are seen as less adaptive for learning, particularly when faced with challenges and setbacks (Harackiewicz, Barron, Tauer, & Elliot, 2002; Utman, 1997; Wang & Liu, 2007; Wolters, 2004). Developing skills to meet certain criteria or standards of learning/mastery for the task or for one's self-improvement characterizes a mastery-approach goal (Anderman & Wolters, 2006; Dweck & Leggett, 1988; Korn & Elliot, 2016). Theoretical and empirical evidence has shown that mastery goals are associated with increased effort, intrinsic interest, high use of metacognitive strategies, and deep cognitive processing (Dweck & Leggett, 1988; Harackiewicz et al., 2002; Kaplan & Midgley, 1997; Papaioannou, Tsigilis, Kosmidou, & Milosis, 2007; Theodosiou, Mattis, & Papaioannou, 2008; Wang & Liu, 2007).

Researchers have generally agreed on the distinction between the standpoints of competence; however, not quite so the standards of competence (e.g., Senko & Dawson, 2017). Some argue that performance goals must involve a normative comparison (Elliot, 1999; Elliot & Church, 1997). Other researchers conceptualize performance goals to include nonnormative goals like performing to an absolute standard (i.e., a perfect score) rather than a comparison to others (Elliott & Dweck, 1988; Grant & Dweck, 2003). This study does not assume either of these conceptualizations of the centrality of standards for determining achievement goals. Rather, we explore how students evince characteristics of goals with regard to both standpoints and standards of competence.

Achievement goal theory is especially appropriate as a framework for understanding the role of competition in a learning environment because the theory posits that competition leads to the

promotion of performance goals rather than mastery goals. Achievement goal theorists Anderman and Anderman (2009) recommend avoiding competition in classrooms in favor of an emphasis on personal improvement, effort, and learning for the sake of learning. However, using the standpoints and standards characterization of goal theory, Korn and Elliot (2016) argue that the influence of competition on motivation is more nuanced. Students may engage in self-referenced competition, with the standpoint of striving for personal improvement, akin to the pursuance of mastery goals. Individuals can also engage in interpersonal competition (normative standard) or competition towards some absolute outcome (nonnormative standard) with the standpoint of wanting to demonstrate competence, or avoid demonstrating incompetence, aligned with a performance goal. Each of these types of competition may influence students' adoption of achievement goals and therefore impact subsequent motivation and achievement related outcomes in varying ways.

A meta-analysis of competition- and achievement-related outcomes showed a null effect of competition on student motivation and achievement, which the authors contended was due to the distinction between the orientations of performance goals: When competition led to performance-approach goals, it had a positive impact on motivation and achievement, but a negative impact when performance-avoidance goals were salient (Murayama & Elliot, 2012). Shin, Lee, and Seo (2017), in their study on normative feedback, also found support for the claim that competition could lead to both outcomes. Still, many motivation theorists suggest that competition promotes negative behaviors and leads to lower achievement and other negative outcomes (Hattie, 2008; Kohn, 1992; Linnenbrink, 2005). An early study by Deci and colleagues (1981) showed that competition decreased intrinsic motivation.

Considering how academic achievement plays a role, Epstein and Harackiewicz (1992) determined that achievement level is an important moderator between competition and motivation, with competition enhancing motivation for high achieving students but undermining the motivation of lower achievers. Furthermore, there is evidence that competition can be beneficial for gifted students, as it can build resilience and enhance self-directed learning when students have high perceived competence (Bicknell, 2008; Karnes & Riley, 1996). However, other research shows that even for gifted students, competition can cause harmful stress and feelings of failure (Davis & Rimm, 2004). In general, research shows that cooperation is more beneficial than competition in motivating people (e.g., Johnson, 2003).

Purpose

This study sought to add to the literature on motivation, achievement goals, and competition by exploring how students actually think and feel about competition in the classroom. The study also specifically considered perceived perceptions of competence (based on students' responses to interview questions) and levels of academic achievement, although the measure is limited in use being that students were distinguished only as being in an AP course or not. There are high achieving students who may choose not to, or for other reasons are not able to enroll in an AP course.

The goal of the study was to add to the understanding of the influence of competition on student motivation and subsequent achievement-related outcomes, and to create a conversation on how

competition could be approached by teachers and schools. Thus, we investigated the following research questions:

- 1) How do high school students perceive the role of competition in academic settings?
- 2) How do their perceptions of academic competition influence their motivation and achievement-related outcomes?

Methods

Research Sites

The researchers conducted individual interviews with 11 high school seniors; five from a large public school and six from a mid-sized private Catholic school in the Midwest. The large public school had a student population of about 3,500 students in grades 9-12, with 78% of the students identifying as White, 7% Black, 6% Hispanic, 5% Asian, and 4% other. The school had a 96% graduation rate and offered 28 Advanced Placement (AP) courses. The school was rated among the top 5% of schools in the state. The private Catholic school had an enrollment of about 670 students in grades 9-12. The student population was 60% White, 28% Black, 4% Hispanic, 1% Asian, and 7% other. The school reported that 100% of their students graduate and 98% matriculate to college. Twelve AP courses were offered. These schools were chosen out of convenience, as the researchers had established relationships with the schools. Despite the differences in school size, affiliation, and demographics, the schools were deemed to have similarly high levels of emphasis on academic excellence.

Participants

The researchers personally introduced the study and recruited students from AP English classes as well as from regular and remedial English classes in order to have a mix of achievement levels, since competition is likely to be perceived differently depending on ability level (Deemer, Yough, & Morel, 2018; Epstein & Harackiewicz, 1992). The final volunteer sample consisted of five students in an AP-level course and six students in non-AP courses. The breakdown of participants by course, gender, and school are in Table 1.

Table 1
Study Participants

-	AP Course		Regular Course		Remedial Course	
	Boy	Girl	Boy	Girl	Boy	Girl
Public School	-	2	1	1	1	-
Catholic School	2	1	1	2	-	-

Data Collection

Interviews were audio recorded and transcribed for coding. Dedoose Version 8.2.14 (2016) qualitative analysis software was used for analysis. The researchers coded passages according to an *a priori* list of codes developed based on achievement goal theory (Saldana, 2009). These are

noted in Table 2. Examples of student comments indicating mastery goals with an approach orientation were "trying to grow" and "trying as hard as I can and working and learning as much as I can." There were no instances of mastery goals with an avoid orientation. Examples of reports of performance goals with an approach orientation included competing "to stay ahead of the pack" and "comparing your results and seeing where you are . . . if everybody else is struggling, it makes you feel better about yourself." Examples of reports of performance goals with an avoid orientation include, "I don't want to be the only one that got a C on it" and "I don't like to be bad in school, so I knew I had to do whatever it took to be as good as this smarter kid."

Table 2
A Priori Code List for Student Interviews

A Priori Codes	Description	
Mastery	Evidence of an attitude consistent with mastery goal orientation.	
Approach	Reports of approach behaviors associated with a mastery goal.	
Avoid	Reports of avoidance behaviors associated with a mastery goal.	
Performance	Evidence of an attitude consistent with performance goal orientation.	
Approach	Reports of approach behaviors associated with a performance goal.	
Avoid	Reports of avoidance behaviors associated with a performance goal.	

In addition, the researchers used grounded theory (Strauss & Corbin, 1990) to identify emergent themes from the data. The final code list is included as Table 3. Perceived competence is listed first because it was the code that was most salient to the themes explored in this study. Examples of indications of low perceived competence were: "I'm not so good at math," "I'm not a book smart person," and "I'm not the best student." Examples of students describing themselves as having high perceived competence were: "I just took the test and I'm pretty sure I did good on it," "I generally pick up stuff quickly," and "I know I'm smart."

The two researchers coded a subset of 2 of the transcripts independently before meeting to compare and reconcile any differences in coding through discussion. Differences almost always consisted of one researcher applying more codes to a particular passage than the other researcher. There were some cases of disagreement in the use of a code, and in these instances, researchers explained their thinking and decided together which code(s) were appropriate. They repeated this process of looking independently at subsets of 2-3 transcripts and then discussing until all transcripts were coded for analysis. The researchers then wrote detailed memos for each participant and examined codes across participants, analyzing patterns of co-occurrence and frequency of themes. In order to not overlook the possibility of differences in perceptions between males and females or students from public and private schools, we looked for differences in the frequency of occurrence of each theme between the groups. We also asked students specifically if they thought anything was special about their school (public or Catholic) regarding competition. We found no discernable pattern.

Table 3
Emergent Code List for Student Interviews

Emergent Codes	Description		
Perceived Competence	ence Comments about own or others' academic ability level.		
Low	References to self or others' low ability.		
High	References to self or others' high ability.		
Anxiety	Mentions of stress, nervousness, anxiety, and/or pressure.		
Emotion	Emotions indicated other than anxiety or stress.		
Negative	Reports of madness, anger, frustration, sadness, annoyance, humiliation.		
Positive	Reports of excitement, joy, pride, accomplishment, fun.		
C			
Cooperation	Endorsement of collaboration or cooperation during learning.		
Individual Differences	Recognition of variability in their needs and responses to competition.		
murviduai Differences	Recognition of variability in their needs and responses to competition.		
Outcomes	Mention of later outcome as "reason" for competing (i.e., NHS,		
Outcomes	valedictorian, college, sports, etc.).		
	varioticitani, contege, sportis, etc.).		
Relationships	Mentions of with whom they are competing, or obtaining information or		
r r	constructing beliefs regarding competition.		
Self	Student competes with self (to improve)		
Peer	Friends or classmates compete or interact with one another		
Family	Siblings competing and/or family's beliefs regarding competition		
Teacher	Student references teachers' views on competition		
1 0001101	The second secon		
Strategy	Reference to a specific strategy used for competition (i.e., cheating in		
C.	order to beat someone).		
	,		
Value	Expressing the value of competition and/or its outcomes.		
Negative	Evidence of a negative valence towards competition.		
Neutral	Evidence of neither positive nor negative valence towards competition.		
Positive	Evidence of a positive valence towards competition.		
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Results

The objective of the current study was to explore high school students' perceptions of competition in academic settings and the influence of competition on academic motivation. An analysis of the students' interviews suggests that all students in the study had encountered and engaged in competition in some form in school. Competition for these students was associated with having performance goals and was seen as both a positive and negative, despite the fact that students' descriptions of specific experiences with competition were largely negative. Four dominant patterns of experience with competition emerged across the interviews. These four patterns are represented in Figure 1, which depicts the interaction of two conditions.

	Perceived Competence						
		Low	High				
Stakes	Low	Disengagement	Enjoyment				
	High	Diminishment	Stress				

Figure 1. Responses to Academic Competition Based on Perceived Competence and Stakes

The themes that emerged from the student interviews indicated that students' perceptions of and experiences with competition are related to 1) whether the outcome of the competition was high or low stakes, and 2) whether students had a high or low sense of perceived competence for the subject or task. Students were coded as having either a high or low sense of perceived competence, which was based on self-reported responses to interview questions. A third condition, which was less salient in students' perceptions of competition, but nonetheless merits discussion based on our results, is whether participation in competition was autonomously chosen or imposed on students by the classroom context. Presentation of results begins with a general description of students' perceptions of academic competition followed by a discussion of each of the four patterns of experience with competition as displayed in Figure 1. A discussion of the role of autonomy is integrated into each of the four patterns of experience.

Students' Perceptions of Competition

Although AP students reported being more competitive than non-AP students, students' descriptions and definitions of competition were similar. Some AP students described themselves as being "somewhat" competitive, while others described themselves as being "very, very" competitive. One AP student said that she competed "just in school" but all AP students admitted that competition is "pervasive" in AP classes. Four non-AP students explicitly stated that they did not consider themselves to be competitive people. Two non-AP students considered themselves to be competitive people. All six non-AP students admitted that competition is valuable for "specific people," namely those who are highly skilled and have particular goals for achievement. Four out of six did not tend to see themselves as members of this group in any context.

Despite these different tendencies towards competition, both AP and non-AP students reported engaging in competition in school and defined competition in a similar manner. Their definitions reflected both the standards and standpoints of an achievement goal framework as described by Korn and Elliot (2016). The normative standards of a performance goal were evident with terms like "a challenge in which you strive to beat other people," "a non-violent fight," or "fight against each other." Eight out of the eleven students also hinted at the self- or task-related standards of a mastery goal when they defined academic competition as "growing yourself by having a rival around you" and "something you have to work for." These students still referenced

performance goals more often, with codes being applied for performance goals almost four times as frequently as mastery goals. Therefore, based on students' definitions as a whole, it was clear that competition was more closely related to a performance goal orientation.

Students also distinguished between two forms of competition, high stakes and low stakes. Although students did not use those specific terms to describe their experiences with competition, their interview responses indicated that some forms of academic competition were perceived as more salient for future goals or self-concept (high stakes) and that other forms of competition were friendly or fun and had less impact on their educational attainment or self-beliefs (low stakes). High stakes competition involved desired outcomes like the role of valedictorian, membership in the National Honors Society, being named a National Merit Scholar, college admission, and social recognition and respect. Low stakes competition involved experiences like comparing exam grades with friends and team competitions in class. Responses to each of these forms of competition were influenced by students' self-reported perceived competence in a given task or activity. The interaction of stakes and perceived competence in turn influenced students' motivational outcomes associated with competition.

Fun: Low stakes/High perceived competence. For students with high perceived competence, whether AP or non-AP, low stakes competition was associated with "fun" experiences that fostered "community" or camaraderie. One AP student said, "I think, just competing with your friends can be fun. Even if you don't do the best or you don't win, knowing that you tried your best and you did it with your friends is the most important." For non-AP students with high perceived competence, low stakes competition was also seen as fun but lacked the emphasis on self-improvement and social interaction that was evident in the responses of higher achieving students.

I don't really compete against other students unless it's my friends just to joke around and see who can get a better score. My friends, we had [math class] in different hours so we'd always try and see who'd get the best score. It usually ended up being me. . . At the same time, I don't find it difficult to do Algebra 2. . . To me, it was kind of like, 'All right. I guess I'll take first.'

Another non-AP student indicated that she is more competitive in subjects in which she tends to do well: "Like math and science...I'm very competitive. I feel like those are probably two of my stronger classes that I take." This student also indicated that she competed with a cousin in the same class by comparing grades and then they helped each other when they struggled in subjects; however, she indicated that for her, winning is important: "I definitely make sure I do better."

It seems that both of these students autonomously chose to engage in low stakes competition, perhaps due to their high perceived competence in each of these situations. However, salient aspects of the competition that led to the classification of "fun" seem to differ. For the non-AP student, the most salient aspect of low-stakes competition was the certainty that he would win, indicative of the normative standards of a performance goal orientation. For the AP student, winning at low stakes competition seemed to be less important than personal improvement and social interaction, which is more indicative of the task and self-related standards of a mastery goal orientation. This may suggest that students who tend to populate AP courses and those who

enroll in regular courses may choose to engage in low stakes competition for different reasons that could be associated with their history of success. Perhaps for students in courses with peers with a range of achievement levels, even one with relatively high perceived competence for a particular task, the outcomes of low stakes competition are more salient for their academic self-concept and thus, they tend to focus more on normative comparisons. For AP students, perhaps the low stakes aspect of this type of competition combined with their relatively stable high perceived competence frees them to focus on the task, self-improvement, or social interaction rather than winning the game. Either way, it seems that this particular combination of conditions, low stakes and high perceived competence, may be enjoyable for students that make it into AP courses, but less so for other students.

Disengagement: Low stakes/Low perceived competence. Although non-AP students saw some value in low stakes competition when they reported high perceived competence in a particular subject, they tended to withdraw or disengage from competition in low stakes situations when they had low perceived competence. They cited two major reasons for disengagement from low stakes competition: 1) they associated it with anxiety and pressure, and 2) they wanted to protect or preserve their self-concept. One non-AP student discussed the unnecessary stress created by competitive classmates.

I think that not everything has to be a competition, necessarily. People always make it a competition; you might be pressuring other people to stress them out and other people don't perform in an environment like that. Where some people like low stress and that's where they can perform better and they're not pushed.

For this student, competition, even low stakes competition, seemed to be synonymous with pressure, and high ability seemed to be synonymous with ability to work under pressure. She seemed to think that competition is unnecessary, or perhaps even harmful, in the classroom environment for some students but not for others, suggesting that there are individual differences in responses to competition. Thus, in her view, students should be able to opt in or opt out autonomously.

One non-AP student seemed to have chosen to opt out or disengage from competition due to her low perceived competence. She stated that she "used to be [competitive], but no longer." She said that she does not "really get into people's faces about competition especially as I'm not the best student." She went on to explain that this is true even for low stakes situations. "It's not something that I'm very interested in trying to . . . I don't show people my grades, I don't speak about my grades, I don't talk to people about my academics except my best friends and my family." This suggests that perhaps this student chooses to discuss academics only in contexts where she feels safe, such as with best friends and family, and for her, a competitive context may be threatening to her self-concept.

Another non-AP student talked about disengaging from a classroom game to protect his self-concept.

Especially in classes like Spanish where I'm not the best, I don't want to be wrong, but in the same fact, I don't really mind being wrong. It's why waste the time . . . I don't feel

like participating for the fact that it's like I know I'm going to not be correct . . . I let all the people who want to participate and get all into it, they can go have their fun.

For this student with low perceived competence, a low stakes competition like a class review game seemed to be a threat to his self-concept. He acknowledged that this type of competition might be fun and engaging for some students. However, it seems that a classroom environment that fosters competition, even the low stakes variety, might be detrimental to the learning and engagement of students with low perceived competence like this one. Here again, it seems that those with low perceived competence are focused on normative comparisons associated with performance goals, and that a classroom environment that emphasizes normative comparison through competition is more harmful for those students who tend not to win.

Stress: High stakes/High perceived competence. Students who reported high perceived competence reported engaging in high stakes competition, whereas students who reported having low perceived competence tended to diminish the importance of high stakes competition by opting out of competitive aspects entirely (see next section for explanation of this pattern). Although many students discussed the value of this type of competition (i.e. self-improvement, incentive, recognition), students with high perceived competence associated high stakes competition with stress. These students tended to use their desire to outperform their peers as motivation, reflective of the normative standards of a performance goal orientation, but experienced negative emotions when they lost. One AP student said,

We had to take the PSAT, so that one for the National Honors and stuff like that, that was big for me and I missed the benchmark. A couple of the kids that got recognized were two points ahead of me and that was a real gosh darn moment.

In general, these students talked about the potential for pressure, stress, and anxiety to be associated with their drive to outdo others. However, students were confident enough in their abilities that they were not discouraged from future competitions when they did not come out on top. Their high perceived competence seemed to act as a protective mechanism for those who experienced loss associated with competition. Students reported responding to pressure and stress by putting in more time and effort, using different study strategies, and asking for help from peers and teachers to ensure that they did not lose again. Despite these largely positive strategies, one AP student admitted that in the face of challenge he is tempted to cheat rather than fail:

Instead of me thinking through a problem, to really think through a problem and I may get it wrong, because I don't allow myself to fail, because I am so concerned with my status. I'm more inclined to just go to Google for an answer, or to perhaps cheat, or even sometimes it just motivates me in wanting to get on my teacher's good side, almost be like a teacher's pet. I think it helps and in some ways hurts because then you try to take the easy route.

Like his non-AP counterparts, this same student also believed that if competition was overtly emphasized in the classroom it can make for a "hostile environment." Another AP student stated, "I'm already competitive, and when you put me in a competitive environment, that puts me over

the edge." This suggests that a classroom culture that fosters performance goals and encourages competition could be harmful to even the most confident students who already have a performance goal orientation and choose to compete.

Diminishment: High stakes/Low perceived competence. Students with low perceived competence tended to diminish the importance of competition in high stakes situations as much as possible. They engaged in mandated high stakes exams (e.g., ACT and SAT), and most discussed putting forth their best effort because they reported valuing outcomes such as college admission. However, these students avoided *competing* in all of these high stakes domains. Whereas students with high perceived competence reported comparing scores and trying to outdo one another on high stakes tests like the SAT, students with low perceived competence took the tests but did not report comparing or even being concerned with the scores of other students. Students with low perceived competence tended to report caring whether scores were high enough to be admitted to college, but not whether they out-scored anyone. Just as in the low stakes/low perceived competence pattern, non-AP students cited two major reasons for diminishing competitive aspects of high stakes situations: 1) they associated it with anxiety and pressure, and 2) they wanted to protect or preserve their self-concept. One non-AP student said that she thought the pressure created by competition inhibits creativity and dissuades AP students from taking advantage of the diverse course offerings at her school.

I think academic competition gets the pressure on students . . . it just doesn't have to be so huge, since there's more different things that students can do . . . I really notice that most people who compete really hard, tend to not take any fine arts, and usually take all these AP courses. I see them really stressed out.

Thus, this student chose to avoid taking AP classes in order to avoid the stress she associated with them. In other comments, she also indicated that she felt that she had to avoid competition and challenging courses so that she was able to pursue her interests.

Another AP student talked about opting out of high stakes competition because he knew he could not win. "I know my grades are good enough to get into college, but I'm not going to go all out to be valedictorian since I know I'm not going to be." This same sentiment was expressed by another non-AP student who avoided high stakes competition; however, this student also lowered his expectations for success because he was certain that he would lose at high stakes competition.

No one wants to be a loser. . . If you are trying to be the winner, more often than not you are going to be disappointed. If you are just trying not to be the loser, you are probably not going to be disappointed.

It seems that all students encounter or engage in competition in some form in school, but the nature of the engagement in competition seems to be heavily influenced by perceived competence. Low perceived competence increases the risk associated with engaging in competition of any form, and a classroom environment that fosters competition seems to be particularly detrimental for these students. Students with low perceived competence tended to engage in normative comparison associated with performance goals almost exclusively, which

means that they are always failing by comparison. This results in maladaptive patterns of motivation, such as disengagement and avoidance, when faced with competition in academic settings. Students with high perceived competence display more adaptive patterns of motivation in response to academic competition. However, even for these students, competition can lead to stress and pressure. AP students, like non-AP students, tend to focus on normative comparisons when participating in academic competition but also hint at more self- or task-related goals such as improvement. Students with high competence seem to be able to manage the risk and pressure associated with high or low stakes competition, engage in both types of competition freely, and use it as motivation for improvement as long as the classroom environment does not compound the stress or pressure already associated with it.

Summary

The research questions guiding this study were related to how high school students perceive the role of competition in academic settings and how their perceptions of academic competition influence their motivation. When asked about their experiences with academic competition, students described competitive classroom environments in ways that were consistent with inducing performance goal structures, providing support for the theoretical link between competition and performance goals, particularly with a normative standard (Korn & Elliot, 2016). They described competitive classroom environments in which they felt comparison to peers, ability demonstration, the appearance of not being a "loser" was valued over and above the process of learning and improvement. Their characterizations of how competition influenced motivation varied based on perceived competence and level of stakes, ranging from being viewed as fun, to a complete avoidance of competitive tasks. Students who found competition fun were those who had high perceived competence and expectancy for success in the competition and felt that the stakes were low enough to avoid inducing stress. Those who were autonomously choosing to participate in optional competitions also found it fun. In all other cases, competition was perceived negatively by students. Students in AP courses in high stakes situations felt stressed by competition. Students in non-AP courses perceived competition as a cue to disengage from low stakes situations or to avoid the competitive aspect of higher stakes situations.

Implications and Recommendations

Considering these findings, this study points to a few key implications for teachers as well as some future directions for continued research. First, given the scarcity of conditions under which competition seems to have a positive impact on motivation, this research suggests that teachers should consider eliminating competitive aspects of classroom environments. Some teachers likely use competition in classrooms because they think students will enjoy it and be motivated by the competition. Rather, this study suggests that the potential motivational benefit of including competition in classrooms only seems to apply to those students who already have high perceived competence for the material and likely have a sense that they could compete well and possibly win the competition. Students who need the motivational support the most are more likely to be negatively impacted by competition, which could reinforce their perception of low competence due to losing or placing behind their peers. Students who are naturally competitive and wish to engage in academic competition will find ways to compete with friends outside the

confines of classroom activities. For example, students discussed how they shared and compared graded work or how they enrolled in competitive academic extracurricular activities. The slight potential benefit of classroom competition for the enjoyment of these students seems to be outweighed by the negative perceptions of competition by those without high perceived competence and/or in high stakes situations.

For students who experienced competitive environments negatively in schools, this research suggests that the link between competition and having performance goals, particularly with normative standards, could have implications for teachers. Students experienced competition as stressful when they were focused on demonstrating their competence favorably in relation to others (performance-approach) or as disengaging or as a cause for avoidance when they were trying not to look incompetent in relation to others (performance-avoidance). Teachers could possibly mitigate these negative outcomes by fostering mastery goal structures in their classrooms, whether or not competitions are present. Research has shown that mastery goal aligned practices, like supporting student autonomy, can buffer against the negative influence of performance goals in schools (Ciani, Middleton, Summers, & Sheldon, 2010). Particularly in cases in which normative competition is naturally made salient, such as with standardized tests or school-level honor roll distinctions, this study suggests that individual teachers should emphasize mastery goal structures in their classrooms.

This study represents an initial step towards understanding how academic competition shapes student motivation. The exploration was limited by the small sample size of only 11 high school seniors from two schools. Although clear patterns emerged among the participants, voices of more students would lend additional support to the findings, as would perspectives of students at earlier grade levels. The study was also limited by the singular source of data from student interviews. Future research could employ additional methods such as surveys, analysis of achievement data, and classroom observations to provide a more robust understanding of the nuanced influence of academic competition on student motivation. Specifically, studying the impact of competition on achievement in addition to students' perceptions could help clarify the implications of this research.

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APPENDIX

Academic Competition Interview Protocol

Thank you for agreeing to speak with me today. I have some questions that I want to ask you about your school and your experiences here. Remember that your responses will be confidential.

What grade are you in?

Tell me about something you really like about your school (building rapport).

- Most of the questions I have for you today are about competition in school. Can you tell me how you would define "competition"? What does that word mean to you?
- In our society, there are many types of competition. People compete in sports, in jobs, on social media, and in lots of other areas. For this interview, I am most interested in *academic* competition, or ways that students compete with one another in the classroom or on school work.
- First, I want to ask about your thoughts about academic competition in general and in your school. Do you think that academic competition exists among students in your school? In what ways?
- When you think about this type of competition, how do you think it impacts students' learning? Does it help or hurt? Why?
- You said you think it helps/hurts learning because... Do you think there are ever times when it also might hurt/help learning? How?
- Are there certain types of students who would learn better from competition than others? What types of students?
- Are there certain types of students who would do worse with competition? What types of students?
- Now I want to ask you about your personal experiences. Do you consider yourself a very competitive person in general? Why/why not?
- I want you to think about a specific time when you experienced academic competition. It can be something that happened in one of your classes, on a specific assignment, or maybe with a specific classmate. Can you describe the situation to me?
- When you were competing, to the best of your memory, what were you thinking about? How were you feeling?
- How important was it to you to win the competition? Why?
- Some people, when they compete, focus on trying to win, some focus on trying not to lose, and some don't really care if they win or lose. How would you describe your focus in this case?

Do you think the competitiveness helped or hurt your learning in this case? Why?

- For these next questions, you can continue to think about that experience we were just talking about or you can think about academic competition more generally.
- How do you think your teachers feel about academic competition? Do they encourage it or discourage it in their classrooms?
- Do you ever talk to your parents about academic competition? How do you think they feel about it?
- I am talking with students in both public and Catholic schools about academic competition. Do you think there is anything special about a public/Catholic school with regard to the role of competition?

Is there anything else you want to tell me about your thoughts on academic competition? Thank you for your time.