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**Responding to rewards and sanctions: the impact on students' sense
of belonging and school affect.**

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Abstract

This qualitative study examines the impact of students' interpretations and responses to rewards and sanctions on sense of belonging and school affect. During a whole school year, six Year 7 students participated in nine semi-structured in-depth interviews about their motivation, including how they interpreted and responded to a school based system of rewards and sanctions. The findings highlight the importance of individual interpretations of experiences on sense of belonging and school affect, and illustrate the inter relationship between these variables. Implications for further research and classroom practice are addressed.

Introduction

Rewards and sanctions are widely used in schools across the world to acknowledge students' academic achievement and learning behaviours as well as encourage compliance with school rules and expectations. Motivation researchers have documented the negative impact of extrinsic control on students' learning, motivation and engagement (Covington, 2002; Deci, Koestner, & Ryan, 2001; Lepper, Keavney, & Drake, 1996; Merrett & Tang, 1994) and some have suggested that extrinsic controls may negatively influence students' sense of belonging and school affect (L. H. Anderman & Anderman, 2003; L. H. Anderman & Freeman, 2004; Roeser, Midgley, & Urdan, 1996). Even so, how students may interpret and respond to extrinsic controls (such as rewards and sanctions) has received little research attention. While it has been acknowledged that students may respond in different ways to classroom variables (Kaplan, Middleton, Urdan & Midgley, 2002; Urdan, Kniesel & Mason, 1999) few empirical studies show how this may occur and the impact different responses may have on students' school affect and sense of belonging.

Sense of belonging has been described by Goodenow (1993, cited in L. H. Anderman & Freeman, 2004) as "psychological membership in the school or classroom, that is, the extent to which students feel personally accepted, respected, included, and supported by others in the school environment" (p. 80). Studies focusing on students' sense of belonging in school contexts have found that a strong sense of belonging can result in positive outcomes including academic motivation (Goodenow, 1993), sense of efficacy, liking for school and emotional well being (L.H. Anderman, 1999b; Wentzel, 1999). A strong sense of belonging has been associated with a desire to learn and increase understandings rather than to demonstrate high ability relative to others or to avoid demonstration of low ability. Lack of sense of belonging has been associated with negative academic outcomes such as truancy and withdrawal from school. Some research has investigated teacher variables influencing belonging such as creating a sense of community (Solomon, Watson, Battistich, Schaps, & Delucchi, 1996), providing support for respect and pedagogical caring (Wentzel, 1997), however, relatively little is known about other social and academic factors that might influence belonging. Some authors suggest that use of extrinsic incentives may undermine students' feelings of being valued and cared for at school (Roeser, Midgley, & Urdan, 1996) and may negatively influence belonging (L. H. Anderman, 2003). While these authors suggest that

extrinsic incentives may influence belonging how and why this may occur remains unclear.

Students who have been found to have a strong sense of belonging in schools have also been found to have positive school affect, that is, they report liking school and being happy at school. Positive school affect has been associated with positive academic outcomes, whereas negative school affect (feelings of disliking school) has been linked to poor academic achievement and truancy. Negative school affect has been found to result in students' feelings of anger, frustration and anxiety (L.H. Anderman, 1999b). While factors such as classroom goal structures have been found to influence school affect, little is known about the role of rewards and disciplinary measures in this process.

Much of the research investigating sense of belonging and school affect has been conducted by use of surveys which rely on correlational data collected at one point in time. Surveys have captured students feelings about school sense with items such as "I can really be myself in this school" (belonging), "I often feel excited and enthusiastic at school" (positive affect) and "I am often angry when I'm at school" (negative affect) (L.H. Anderman, 1999b; Kaplan & Maehr, 1999). Although such studies have enhanced understandings about how sense of belonging and affect influence other variables, little qualitative data has been reported. Qualitative data can offer insight about how individuals' sense of belonging and affect are influenced by school and classroom variables, showing a fuller picture of this process and offering insight into the thoughts and feelings of students which guide their motivational behaviour.

The aim of this study was to investigate how students' interpretations of rewards and sanctions influence sense of belonging and school affect by reporting qualitative data obtained during a year long study of early adolescents. The study focused on two key research questions.

1. How do students interpret and respond to rewards and sanctions in a real school context?
2. Does interpretation and response influence school affect and sense of belonging?

Method

The data reported in this study were drawn from a larger longitudinal exploratory study investigating how multiple contexts influenced the motivation of individuals.

Participants

The participants were six Yr 7 students (five female, one male) from a middle school classroom in a Western Australian metropolitan area. Participants were self-selected based on a willingness to participate in the study. The students spent 80% of their class time with one teacher (Mrs Kelly) yet had different teachers for the remaining 20% of the time, depending on the elective subjects they had chosen. All participants have pseudonyms for the purpose of this paper.

Through the students' school diaries, staff implemented a formal system of rewards and sanctions to both acknowledge student progress and achievement, and manage students' behaviour and non-compliance with school rules. Each student had a school diary which assisted them with organisation and also provided a point of

communication between parents and staff. The diary contained general information about the school and included pages where students could record homework and assignments, pages where parents to write absentee notes and pages where teachers recorded formal rewards (by writing Notes of Commendation) and formal sanctions (by writing Notes of Concern). Two pages were available for Notes of Commendation and four pages were included for Notes of Concern (one each for behaviour, homework, attendance and uniform). These pages were in table form with three columns for teacher name and date, comment, and parent signature. Notes of Commendation were typically written for things such as “great work in class today” and “much improved assignment work” and Notes of Concern were typically written for inappropriate behaviour, non-submission of homework / assignments, being late to school /class and having incorrect uniform. Teachers signed and dated these notes in the designated pages at the back of students’ school diaries and students were required to show them to parents who would then sign them for acknowledgement. The Notes of Commendation and Notes of Concern pages remained in the students’ diaries for the whole year. After receiving four ‘Notes of Commendation’ students would receive a merit certificate at assembly and after receiving four ‘Notes of Concern’ students would receive an after school detention. It is worth noting that this system was not representative of all the ways teachers affirmed and/or reprimanded students, however, this was the formal school record that acknowledged students’ achievements and misdemeanours.

Procedure

Data for this paper were obtained from a larger longitudinal qualitative study of student motivation which used interviews as the primary mode of data collection. Data were collected over the period of an Australian academic year (February – December) and during this time I interviewed students regularly. In December student diary data regarding Notes of Commendation and Notes of Concern was collected in response to students’ spontaneous interviews comments.

Students participated in nine semi-structured in-depth interviews during the year (February, March, May, June, July, September, October, November and December). Interviews were thematic and followed an interview guide to minimise bias and establish consistency across participants. Questions were mostly open-ended allowing participants to fully describe their experiences and provide explanations for their actions. Specific questions were asked about rewards and sanctions, sense of belonging and school affect in March, July, and November (See Appendix A). All interviews were audio taped and transcribed for analysis.

Analyses

Due to the longitudinal nature of this study data collection and analysis was an ongoing and cyclical process.

Interviews were transcribed and inductive processes were used to identify and code key themes emerging in the data. Initial sorting and categorising of the interview data was assisted by QSRNUD*IST4 (QSR, 1997), which was used to organise and store data. Interview data was initially coded into broad categories starting with students’ perceptions and experiences of rewards, perceptions and experiences of sanctions, interpretations and responses to rewards and sanctions, and sense of belonging and school affect. These categories were expanded and subcategories (such as response type – adaptive and maladaptive) developed as

analysis progressed. Adaptive responses were determined if the reward or sanction had a positive or neutral impact on the student's future behaviour and affect, whereas maladaptive responses were evident through students' self-reported negative influences on behaviour and affect. Comments coded as indicating sense of belonging were those where students talked about involvement and belonging at school and comments regarding affect were those where students talked about emotions and feelings related to school (in response to interview questions in Appendix A). Inductive processes were used for all coding. Codes were revised and developed after each set of interviews as suggested by Miles & Huberman (1994, pp. 61-62).

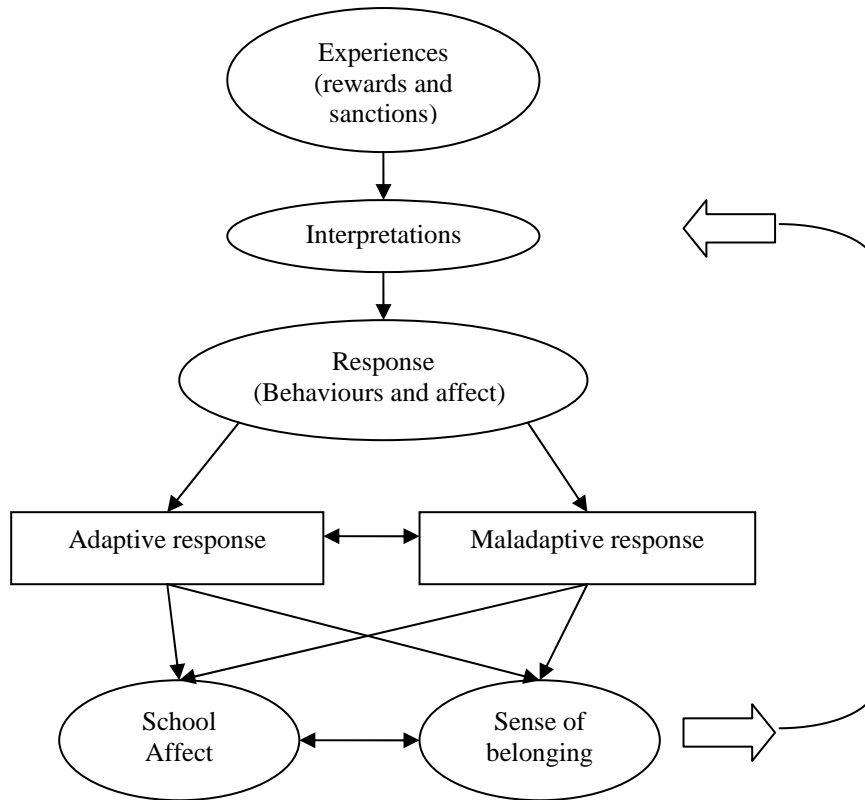
Data from student diaries was firstly recorded in a table showing totals and distribution of rewards and sanctions per student. Sanctions were analysed for content (homework, general behaviour, attendance and uniform). Frequency charts showing rewards and sanctions given were developed for individuals.

Analyses of data from diaries and interviews were conducted via a matrix showing links between data from diaries and interview coding categories. The matrix summarised students' experience of rewards and sanctions, general interpretations (including perceptions and emotional responses), responses towards rewards and sanctions, and comments related to sense of belonging and school affect. While the matrix clearly showed common general interpretations, it more importantly highlighted the relationship between students' responses towards rewards and sanctions, and sense of belonging and school affect.

Results

The results are presented using the key themes shown in Figure 1, illustrating the relationship between students' experiences, interpretations and responses to rewards and sanctions and sense of belonging and school affect. The one directional arrows from experiences to perceptions and interpretations, and then to responses indicate that after experiencing a reward and/or sanction, students perceive and interpret their experience and have both affective and behavioural responses to the experience. Students' responses are influenced by their interpretation of experiences and can lead to either adaptive or maladaptive responses which then may have an impact on sense of belonging and school affect. The arrow in Figure 1 from sense of belonging and school affect to the top of the diagram (experiences) indicates that the process of interpreting and responding to experiences is ongoing over time and allows for the possibility of changes in interpretations and response types. In addition, this arrow allows for the potential influence sense of belonging and school affect may have on future interpretations and responses to rewards and sanctions.

Figure 1. Relationship between rewards and sanctions, interpretation and response to sense of belonging and school affect.



Analyses revealed students to have adaptive and maladaptive responses to rewards and sanctions. Some students had consistently adaptive responses, that is, they were able to view sanctions as indicating ways to improve and actively sought ways to receive rewards. Others however, exhibited maladaptive responses and perceived sanctions to be threatening, contributing to feelings of anger and resentment towards school and teachers. The possibility of changing responses also emerged as one student altered their response from maladaptive to adaptive as the year progressed.

General experiences of rewards and sanctions

Throughout the year five of the six students experienced both sanctions and rewards. Only one student, Anita, experienced no sanctions. Table 1 uses the student diary data to show the distribution of rewards and sanctions per student. The students are grouped according to their main response type.

Table 1. Students' experiences of rewards and sanctions as shown by diary data.

Response type	Student	Total rewards	Total sanctions	Sanctions breakdown			
				homework	behaviour	attendance	uniform
Maladaptive Response	Brett	4	17	6	7	0	3
	Natalie	2	11	3	4	2	2
	Sophia	2	8	5	3	0	0
Total		8	36	14	14	2	5
Adaptive Response	Jessica	2	14	10	3	1	0
	Anita	8	0	0	0	0	0
Total		10	14	10	3	1	0
Changing response	Stephanie	1	7	5	2	0	0
Total		1	7	5	2	0	0
Combined totals		19	57	29	19	3	5

The combined totals highlight that the group of students received considerably more sanctions than rewards (57 sanctions, 19 rewards). The majority of sanctions were received for non-submission of homework (29), followed by inappropriate behaviour (19). While the notes for homework were fairly consistent in content (“did not submit homework”, “has not completed assignment due today”) there were significant variations in the content of notes for behaviour from minor misdemeanours to more serious instances (“wasting time in class”, “has been distracted, rude and uncooperative”).

Looking at sanctions received per response type, it is evident students with maladaptive responses received significantly more sanctions on average than others. Of these, the number of sanctions for behaviour and uniform are much greater (behaviour -14 as compared to 3 and 2 : uniform -5 as compared to 0). It is possible that because these students interpreted sanctions in a threatening manner their maladaptive responses might have prompted demonstration of more inappropriate behaviour and/or a desire to not conform to the school's uniform code. In this instance receipt of sanctions may have contributed to a negative cycle of sanction and non-conformity.

Maladaptive response - Interpretation, response, belonging and affect

The students who had maladaptive responses shared similar experiences of rewards and sanctions throughout the year. Brett received 17 sanctions, 4 rewards and was suspended (asked to remain away from school for a day) on two occasions. Natalie received 11 sanctions and 2 rewards and Sophia received 8 sanctions and 2 rewards. These students shared the perception that sanctions were mostly given for trivial matters, whereas rewards were ambiguous, rare and difficult to obtain.

“What I don't get is that I try to get notes of commendation, I do all these things right and I never get a note of commendation and like other people have got tons of notes of commendation and I'm like 'how do you get them?' It doesn't make any sense to me”
(Sophia, October).

All students spoke regularly and spontaneously of how many notes of concern they had received and the occasions they had been in trouble at school. Brett and Natalie began to link school progress with receipt of sanctions. For example, Brett reported having a “pretty good” term “because I’ve just got one note of concern this whole term, last term I got about eight or something” (May). As such, receipt of sanctions acted as a kind of barometer of school progress.

These students perceived sanctions to be threatening and explained how they led to further consequences at home, such as being in trouble with parents which often lead to withdrawal of activities. They expressed strong emotional responses to sanctions such as anger, resentment, and depression. Brett described being angry and resentful (“I got in trouble for it. I get really, really mad and I hate it,” July) and regularly expressed the view that he had received sanctions unfairly. Sophia referred to sanctions as “stupid” and felt they were mostly undeserved.

Although Natalie initially expressed anger about receiving sanctions, this gradually turned to a more pervading sense of hopelessness about her situation. She reported feeling sad and depressed about being in trouble and was unable to articulate ways she may improve the situation. “Getting in trouble makes me feel bad ... I think about when I go home what I want to do is lie on my bed and cry sometimes” (June). Furthermore, she explained how being in trouble led to reduced academic engagement “I think that getting in trouble makes me go slower ... I think that being put down, like getting told off gets me down. I’m not as enthused to do work.” (June). This connection to academic engagement clearly shows the relationship between sanctions and possible withdrawal from school tasks.

Sophia also expressed anger about sanctions with particular reference to uniform. “I don’t like the uniform. I hate it... you’re not allowed to have high heeled shoes ... and then there’s the hair ... and the skirt ... there’s just so much about this school that I really don’t like ... it’s so strict. I don’t like it”(September). Interestingly Sophia did not receive any sanctions for inappropriate uniform, however the uniform rules ran contrary to her belief that school should offer opportunities for adolescents to develop their identity. “School is like where you learn who you are because you’ve got all these friends and you can develop your sense of individuality” (September). She perceived the uniform constraints at the school stifled students’ expression of individuality. In this instance her response was influenced by a lack of alignment between school rules and her own beliefs.

The strength of these negative emotions significantly influenced the nature of these students’ responses to rewards and sanctions and conveys negative affect. Sanctions were interpreted as direct criticism from teachers who students believed wished to exercise strict control over students. As such, the students responded by becoming more angry and resentful and devised strategies to avoid being in trouble, rather than focusing on improving performance and managing behaviours more effectively.

For Natalie, Brett and Sophia, interpreting sanctions as negative, and responding in maladaptive ways had implications for sense of belonging and school affect which they directly stated.

“I know I can do better it’s just that I can’t help myself not trying as much because I don’t feel the best ... I think that me getting told off puts me down and then my work isn’t as good ... it makes me dislike school even more”
(Natalie, July)

For Brett, receiving sanctions contributed to reduced sense of belonging at school.

“I don’t want to be part of this school ... because I don’t like this school ... it’s too strict and everything ... so I don’t like it and I don’t want to be part of this school ... it’s just too strict. I don’t try to do the right thing all the time, that’s why I’m in trouble most of the time” (July)

In turn this contributed to negative affect through anger and frustration.

“I’ve always hated school, I’ve never liked it. Teachers ... they’re too strict and tell you off too much ... if I don’t do my homework I get in big trouble and stuff” (July).

Natalie spoke of how rewards had the potential to positively influence her sense of belonging at school. She perceived receiving a reward as a sign that she belonged at school *“Actually what makes me feel like I fit in is when I get a note of commendation and I’ve only got one of those”* (September) as it conveyed support and acceptance, but it wasn’t until July (and after receiving seven sanctions) that this reward was received. In the overwhelming face of so many sanctions, the potential effect of this reward was diminished and short lived.

Like Natalie, Sophia perceived receiving recognition to influence teacher student relationships and academic engagement. As she explained, receiving recognition from the teacher was good *“because then I know she doesn’t exactly hate me ... if (the teacher) has told me off or something I’ll be like ‘why should I have to learn off you?’”* (August). This in turn influenced relationships with teachers.

“I used to really hate Mrs K because she used to give me all these notes of concern ... but then I realised you’re not working for the teacher, you’re working for yourself ... so I’m trying to work really hard, not for her but for me, and so I can shove it in her face when I get older” (October)

Even though Sophia did not receive any sanctions in the second half of the year, this statement clearly shows that resentment for the teacher still existed. While influencing affect this also had an impact on sense of belonging *“I reckon the school itself isn’t good”* but this was tempered by peer relationships *“but it’s got all my friends here”* (October).

These three students appeared to experience a cycle of events and emotions which contributed to affect, belonging and engagement. Natalie’s comments suggest a cycle of receiving sanctions, feeling low, negative affect and reduced sense of belonging which contributed to difficulty engaging in academic tasks. These factors seemed to trigger withdrawal from school which contributed to further sanctions for non-completion of work and not concentrating in class. The cycle of misbehaviour and sanction influencing negative affect and sense of belonging for Brett seemed to be ongoing throughout the year.

Adaptive responses - Interpretation, response, belonging and affect

The students with adaptive responses had quite different individual experiences with rewards and sanctions throughout the year. Anita received 8 rewards and no sanctions, whereas Jessica received 2 rewards and 14 sanctions. Although their experiences were different there were distinct similarities in their responses to rewards and sanctions.

Both students perceived rewards as ambiguous both in content and administration. Jessica reported trying to receive rewards but was unsure as to how to attain them. Anita, who was a high achiever, was particularly focused on receiving rewards and consistently strove for rewards throughout the year. As rewards were unpredictable, however, she began to speculate on how they might be received. *“When they (teachers) are giving someone else one and you stand near you might get one”* (July). She also reported observing others manipulate teachers by asking for rewards. *“They (students) say if I be good then can I have them ... it works most of the time ... because they get upset at the teacher”* (September). This strategy however, devalued rewards for her as a note received after manipulating a teacher (“working well in class today”) contributed equally to a merit certificate as a reward for academic achievement and effort (“Excellent result in your Maths test. A great effort! I know you worked hard for this!”). Under such a system the potential value of rewards for Anita became diminished, however, this did not hamper her desire to strive for rewards and demonstrate learning behaviours and outcomes that were rewarded.

Both students believed sanctions were given for minor and sometimes trivial offences, either because of their own experiences or observing the experiences of others. Jessica reported sanctions given for trivial matters were “dumb”, however, expressed her desire to improve and have teachers think of her as a good student. Although Anita did not receive any sanctions, she too observed that some sanctions were trivial and believed this made students angry with teachers.

Anita and Jessica believed that rewards and sanctions were dependent on teacher moods. Thus, when teachers were in favourable moods, the likelihood of receiving rewards was increased, but when teachers were angry or frustrated potential for sanctions was increased.

“Sometimes the teacher is happy and wants to give notes of commendation ... if people are being naughty in class and she was in a good mood that day she would just let them off. But say she was in a very angry mood then she would probably give them a note of concern.” (Anita, May).

These students demonstrated adaptive responses to rewards and sanctions. For Jessica, receiving sanctions for not submitting homework and behaviours such as talking during class lead to consideration of how to improve and she began to actively take steps to avoid behaviours that she knew would result in sanctions and develop other helpful strategies. This involved positive learning behaviours that would assist her in the future such as becoming more organised, developing a timetable to help remember books needed and time, space and resource management for homework.

Anita also responded adaptively by continuing to strive for rewards during the year. Even though she received some rewards for behaviours and achievements she did not value highly, she was persistent and determined in her approach. Sometimes this lead to demonstration of behaviours the teacher regarded highly, even when it meant changing her own beliefs. For example, at the start of the year she reported disliking asking questions as she saw it as a sign of inability, however, as the teacher began to praise the students for asking questions, Anita began asking questions more regularly and in August received a reward for asking thoughtful questions. In this instance Anita’s adaptive response to striving to attain rewards was to demonstrate learning behaviours valued by her teacher and fortunately, on this occasion, it was a behaviour she used in the future to facilitate her own learning.

The adaptive responses these students had towards rewards and sanctions lead them to achieve a degree of success. For Jessica, the number of sanctions declined and for Anita, the number of rewards increased. This small success and the degree of control they both felt seemed to contribute to some positive feelings about being at school. In addition, these students seemed to have a degree of personal resilience that helped them respond in adaptive ways.

Responses to rewards and sanctions began to influence school affect and sense of belonging and this became evident by the emotions students voiced, the most prevalent of which was frustration. Anita became frustrated by the lack of alignment between rewards received and behaviours and outcomes she valued. For example, she received a reward for winning a colouring competition in Japanese, and despite intense efforts and top class scores struggled to receive a reward for her most valued subject, Mathematics. Jessica was frustrated by receiving sanctions for trivial matters such as forgetting a book. This frustration contributed to a degree of negative school affect, however, these students seemed more able to interpret their experiences in ways that may have future benefit. Although they acknowledged feeling frustrated by the system, it appeared that they became quite accepting of it as the year progressed.

Jessica began to report enjoying school because she received less sanctions and invested effort in her schoolwork, even though she described herself as usually not liking school. Even though Anita reported being happy at school and enjoying challenges provided, ambiguity in rewards had an impact on her belonging. As the majority of rewards Anita received did not focus on her high academic achievement which was an important goal for her, she expressed the view that *“this school is not as competitive”*. With the additional information about final exam scores she reported that no students from the school had received high examinations results, *“so I’m not as happy to be at this school”*. She acknowledged her belief that rewards should be given only for high academic performance and top scores. In this case it appeared that sense of belonging was influenced by her perception that rewards failed to recognise and encourage high academic achievement.

These students therefore interpreted rewards and sanctions in adaptive ways as they strove for improvement. Even so, they expressed some frustration when interpreting rewards and this impacted on school affect. Interestingly Jessica, who had received most sanctions, was happy to be at the school, whereas Anita who had received no sanctions was not as happy to attend the school because of its academic reputation. This suggests that factors such as school image and alignment between school and personal goals may also contribute to students’ sense of belonging at school.

Changing response - Interpretation, response, belonging and affect

Stephanie’s approach to rewards and sanctions changed during the year, suggesting the possibility that other factors may mediate responses which have an influence on belonging and affect. She began the year with maladaptive responses towards rewards and sanctions, however as the year progressed these were tempered to be more adaptive responses. This change in response type seemed to have a positive impact on school affect and sense of belonging.

Like the other students, Stephanie perceived sanctions to be frequently received and primarily for minor offences whereas rewards were perceived as ambiguous and difficult to obtain. At the start of the year, the possibility of receiving sanctions made Stephanie nervous and anxious about attending school. She reflected, *“I used to dread coming to school in the morning because ... I (was) scared I (was)*

going to get a note of concern, and I'd come in and then nothing seemed to come out my way. It just dragged on" (November). She reported being extremely anxious about being in trouble. *"I don't like being told off... you feel anxious, scared and almost terrified of the teacher who is telling you off ... and then you feel bad about yourself"* (May).

Like Natalie and Sophia, Stephanie spoke of how sanctions influenced academic engagement. *"Some people don't learn very well in Mrs Kelly's class because she gets angry a bit. She gives out notes of concern easily"* (May). The perception that when teachers use sanctions students are less inclined to learn (due to anxiety about being in trouble or lack of desire to engage) contributed to a hesitancy to trust teachers and develop strong and supportive relationships with them.

Stephanie's experience with rewards and sanctions in the first part of the year prompted emotions of frustration, anxiety, nervousness and hopelessness. She described her disappointment about receipt of sanctions.

"That's striking me down ... I can't do anything about it ... I can't wipe them out and I can't erase them ... I can't get it off the school record any way. I'm stuck with them" (June)

At this point Stephanie reported feeling happy to be at school because of peer friendships, however, concern about lack of rewards and receipt of sanctions made her unsure about how happy she was to be at the school.

In July, Stephanie and her mother were asked to have an interview with the teacher and this proved to be a turning point for her. *"She told me my goals like try and be more quiet, that was my first goal and my second goal was to get better marks and to study and not get any notes of concern"*. After this Stephanie reported using particular strategies to improve and receipt of sanctions declined. In turn this adaptive response contributed to feelings of being happy in the classroom, investing effort in school work and becoming involved in other activities at the school. For Stephanie the relationship with the teacher was pivotal in this change. *"She's helped me change a lot and I think I've changed because I haven't got very many notes of concern and I don't get in trouble as much and teachers, they don't seem to be as angry with me, that's why I'm not scared any more"* (November).

The difference between Stephanie and the students who responded in maladaptive ways was that she was able to develop a positive relationship with her main teacher. Stephanie's view after this was that she was in less trouble because she had made friends with the teacher and that this had also influenced her academic achievement. *"Now that I've made friends with the teacher I'm getting better marks"* (July). Interestingly also, Stephanie's goals and the goals the teacher had for her were now aligned. Stephanie became more focused on striving for rewards (rather than avoiding sanctions) and hoped to receive an award at the end of the year.

Stephanie's case illustrates the possibility of other factors mediating the relationship between experience, interpretation and response and school affect and sense of belonging. The key mediating factor in this instance was the relationship with the teacher, however, this opens the door to consideration of other factors that may mediate this relationship.

Summary

These cases show that how students interpret and respond to the specific system of rewards and sanctions in this context had a critical influence in development of school affect and sense of belonging. A common theme across the groups was that students perceived rewards to be ambiguous in content and

administration and sanctions to be easily received for sometimes trivial matters. Across a range of individual experiences, students' interpreted rewards and sanctions as offering feedback or as threatening and this influenced whether they responded in adaptive or maladaptive ways. In turn, these responses contributed to positive and negative levels of school affect and sense of belonging.

Discussion

The importance of how individuals interpret and respond to experiences and the significance this has for school belonging and affect is highlighted in this study. Although there were shared perceptions among students, their interpretations and responses differed. Some students focused on future improvement, whereas others felt threatened and became more concerned about avoiding sanctions. While there were a range of experiences among students, experience did not predict interpretation and response. Clearly students interpret and respond to environmental cues in different ways (Urdu, Kneisel, & Mason, 1999) and indeed receiving rewards and sanctions had a greater impact on some students than others. The students appeared to 'filter' information about experiences and through this created a framework by which interpretations and responses were constructed. Understanding how students interpret and respond to classroom variables such as rewards and sanctions is critical if we are to improve the quality of learning environments in classrooms.

This study draws attention to the relationship between rewards and sanctions, and school affect and sense of belonging, confirming suggestions that disciplinary actions may contribute to students' sense of belonging (L. H. Anderman & Freeman, 2004). Where students perceive learning contexts to focus on reprimands and punishments for non-compliance with school rules, and where these punishments far outweigh the opportunities for students to be rewarded and experience success, then affect and sense of belonging can be negatively influenced. The students' emotional responses to rewards and sanctions clearly show negative affect through emotions such as frustration, anger, anxiety and sadness. For some, this translated into low levels of sense of belonging through dislike for the school and reduced academic engagement. For others, peer influences and positive teacher student relationships seemed to mediate this association. Interestingly, students who interpreted and responded to rewards and penalties in more adaptive ways still experienced some frustration, which has been associated with negative affect, but yet reported feeling happy at school and enjoying school work. As such, the degree to which rewards and penalties influence school affect is partly dependent on interpretations and responses.

A clear contribution of this study is that it shows how systems of reward and sanctions may influence the development of school affect and sense of belonging over time. For the students with maladaptive responses there was a compounding effect, where maladaptive responses to sanctions contributed to negative affect which increased over time. For other students, however, mediating factors lessened possible negative impacts over time. As teacher and peer relationships have the potential to mediate the interaction between interpretations of rewards and sanctions and sense of belonging and school affect, therein lies the possibility of changes in affect and belonging over time. Given this, future research could investigate factors which mediate the relationship between classroom instruction and belonging and affect in schools.

In addition, this study shows that there is a potentially positive relationship between use of rewards and sense of belonging and school affect. Two students reported the perception that rewards communicated a message of belonging at school and this extended to feeling supported by teachers. Although the sample size here is small, this suggests that rewards may be used to positively enhance belonging and affect. How teachers might use rewards to enhance students' sense of belonging in classrooms would benefit from further investigation.

Conceptually, this study raises the question about the direction of the relationship between belonging, affect and rewards and sanctions. Although the research shows interpretations of rewards and sanctions to influence affect and belonging, the reverse may also be true. For example, it may be that students with negative affect are more likely to be non-compliant (and in this instance receive sanctions), or it may be that the outcome of non-compliance (sanctions) results in negative affect and belonging. Results from this study emphasise the need for further research focusing on inter relationships between classroom variables and development of sense of belonging and school affect.

Finally, this study highlights the importance of how classroom processes occur, with particular regard to how teachers administer rewards and sanctions. Some authors have argued that how rewards are used might be more important than whether or not they are used (L. H. Anderman, Patrick, Hruda, & Linnenbrink, 2002), and this study confirms the significance of how rewards are used. The relative scarcity of rewards in this instance and the unclear criteria for being rewarded left students struggling to avoid failure rather than striving to be successful (Covington, 2000). It is of critical importance then that educators reconsider ways extrinsic rewards and systems of behaviour management can positively facilitate learning (McCaslin, 2006) and provide clear criteria for reward, frequent opportunities for students to be rewarded and contribute to the creation of high quality, supportive relationships between teachers and students. Such a process would clearly have a positive impact on school affect and sense of belonging in our schools.

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Appendix A

March

- Have you received any Notes of Commendation or Notes of Concern? What for? How do you feel about this? Why do you feel this way?
- How do you feel about being at this school? Why? (belonging)
- Are you happy at school? Why/why not? (affect)

July

- Have you received more Notes of Commendation or Concern? Can you tell me about these? How do you feel about this?
- Do you want to be involved in this school? Why/ Why not? (belonging)
- Some students seem happy to be at school and others not so happy. How do you feel about being at this school? Why?

November

- Do you have any more Notes of Commendation or Concern? Can you tell me about these?
- Do you think that Notes of Commendation and Concern affect the way students learn?
- Do you feel that you belong at this school? What kinds of things make you feel as though you belong here?
- Are there particular things that make you feel happy to be at this school?
- Is there anything that makes you feel unhappy to be at this school?