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Running head: Teachers' ratings of feedback

**Examining teachers' ratings of feedback following success and failure: A study of
Chinese English teachers**

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Abstract

Background: Previous research has explored the impact of different types of praise and criticism on how children experience success and failure. However, less is known about how teachers choose to deliver feedback and specifically whether they deliver person (ability) or process (effort) feedback.

Aim: The aim of the current study was to use vignettes to explore how teachers would deliver feedback following success and failure.

Sample: The sample consisted of Chinese Primary school English teachers ($N=169$).

Method: Participants read vignettes depicting children's educational successes and failures. They rated their perceptions of task difficulty, likelihood of giving feedback, and likelihood of giving both person and process forms of feedback. They also completed measures of whether they viewed intelligence as fixed or malleable.

Results: Results suggested that teachers stated that they would be more likely to give praise than criticism and would be more likely to give feedback for tasks perceived to be more challenging than easy. Following success, teachers endorsed the use of person and process feedback interchangeably, while following failure they endorsed more process feedback.

Finally, teachers' understanding of intelligence was also associated with feedback delivery. If teachers believed that intelligence was fixed (vs. something that can be developed), they said that they were more likely to give more person and process praise, but following failure gave more process feedback.

Conclusion: The current research gives insight into how teachers give feedback, and how perceived task difficulty and teachers' views of intelligence can influence these choices. Further research is needed to understand why teachers may make these decisions.

Keywords: feedback, theory of intelligence, praise, criticism, teachers

Examining teachers' ratings of feedback following success and failure: A study of Chinese English teachers

Feedback is one of the top ten influences on learning, affecting performance, emotion regulation and student satisfaction (Hattie, 2009). Praise has been found to be the most common form of feedback in the classroom, used to maintain academic motivation, behaviours and positive learning strategies (Koestner, Zuckerman, & Koestner, 1987; Schunk, 1994; Delin & Baumeister, 1994). Criticism following failure is also common and important for learning as it signals when the required standard has not been achieved (Heyman, Fu, Sweet & Lee, 2009, Sutherland, & Wehby, 2001; Dweck, 1999; Twenge, 2006). However, whilst research has focussed extensively on the impact that feedback has on learners, there has been less attention paid to the ways in which teachers deliver feedback. The current study attempts to fill this gap in the literature by exploring how teachers choose to deliver praise and criticism to students.

Types of feedback

Although there are a number of different forms of feedback, the current paper will use the influential framework put forward by Dweck (1999) which suggests that feedback can be delivered in either person or process forms. Person forms of feedback relate to an individual's abilities (e.g., "You're good at English"). Such feedback suggests that performance is due to inherent traits that are stable and difficult to change. In contrast, process forms of feedback focus on efforts and techniques (e.g., "You worked hard at this"), suggesting that performance can be improved. Dweck (1999) suggests that person feedback lead to negative outcomes for children. For example, children who receive person feedback tend to choose performance goals over learning goals. This is because person feedback suggests that innate traits lead to success, encouraging children to focus more on proving that they possess this trait rather than focussing on improving it (Hong, Chiu, Dweck, Lin, &

Wan, 1999; Mangels, Butterfield, Lamb, Good, & Dweck, 2006; Nussbaum & Dweck, 2008; Rhodewalt, 1994). In addition, those who receive person forms of feedback tend to show a helpless response to failure namely negative affect, low persistence and self-handicapping behaviours (Dweck, 1999).

In contrast, process feedback focuses on what children have done, rather than on their innate traits, giving them more of a sense of control over their learning. They therefore choose learning goals to increase their knowledge, and show a mastery response to failure, displaying more positive affect, persistence and improved performance in future. This is because process praise suggests that a learner can improve in future, which is why they feel less negative and continue to persist (Kamins & Dweck, 1999; Mueller & Dweck, 1998; Henderson & Dweck, 1990). There is some literature which suggests that process feedback is not always beneficial (See Skipper & Douglas, 2012; Henderlong Corpus & Lepper, 2007; Lam, Yim, & Ng, 2008). However, the literature broadly suggests that person feedback leads to more negative outcomes than process feedback, especially in the short-term.

Although the aforementioned research has illustrated the impact of person and process feedback on children, much less is known about how teachers deliver these different forms of feedback. This is important, as research currently makes the assumption that teachers are using both forms of feedback, but we have very little data on whether this is the case. We also do not know how teachers' feedback delivery can be impacted by variables such as their own view of intelligence and the perceived difficulty of the task. Knowing this will help us to better understand how context and beliefs can impact feedback delivery.

Feedback following success

Praise is the most common form of feedback in classrooms (Bond, Smith, Baker, & Hattie, 2000). Brophy (1981) found that praise can increase self-esteem, provide encouragement and help create a close relationship between student and teacher, unlike more

informational forms of feedback. Praise is “ever-present” (Hattie, 2010, p.7), welcomed and expected by children as 91% report wanting to be praised “often” or “sometimes” (Burnett, 2001). Praise has also been found to make up over half of all feedback delivered to children (Hyland & Hyland, 2006). Research strongly suggests that teachers prefer to deliver praise over criticism (Burnett, 2002; Sutherland, & Wehby, 2001; Lyster & Ranta, 1997; Brophy, 1981). However, there is very little research examining how much teachers use person and process forms of praise. We know that this choice determines important outcomes for students, so it is important to understand how teachers choose to deliver their praise in practice. Briggs (1970) suggests that parents feel person praise is necessary to encourage children and increase self-esteem. However, teachers may be aware of a recent emphasis on giving feedback on the behaviour and not the child, and therefore choose to use more process than person praise. An alternative possibility is that praise is a spontaneous response to success (Crespo, 2002). Because the success was expected, teachers may not analyse why the child was successful and may therefore use ability and effort forms of feedback interchangeably. The current study aims to determine which is the case.

Feedback following failure

Learners often receive criticism when their work has failed to reach the required standard. Podsakoff and Fahr (1989) found that when an individual received negative feedback it made them more dissatisfied with their previous performance level and they set higher performance goals for the future. As a result, they performed at a higher level than those who were praised or received no feedback. Receiving negative feedback can therefore lead to the greatest improvements in performance (Gross & John, 2003).

Research suggests that praise occurs nearly four times as often as criticism (Wheldall & Beaman, 1994). However, the form of criticism (process or person) is also important in determining outcomes for students. Additionally, whilst delivering praise may be

spontaneous and teachers may not carefully consider how it would be best to word it, delivering criticism can be very difficult (Veiga, 1988). Indeed, Baron (1990) found that criticism, if badly delivered, can lead to high anger levels, low self-efficacy levels and poor attempts to improve performance. Similarly, Burnett (2002) found that students who reported a positive relationship with their teacher reported receiving little criticism. Therefore, teachers may be likely to consider how best to phrase criticism in order to avoid any potential negative effects. Some research suggests that following failure teachers use more effort attributions than other attributions (Heller & Eccles Parsons, 1981). Additionally, effort feedback has been found to be associated with a more positive student-teacher relationship (Burnett, 2002). It could therefore reasonably be expected that teachers will deliver more process than person criticism.

Teachers' theory of intelligence

Person and process feedback are strongly linked to Dweck's (1999) theory of intelligence. According to this theory, people can hold either an entity or incremental theory of intelligence. Those with an entity theory view intelligence as a fixed trait, which cannot be changed. Person forms of feedback can promote this entity view. In contrast, some people hold an incremental theory of intelligence and believe that intelligence can grow and change. Process forms of feedback, which focus on effort and techniques, promote an incremental view of intelligence.

It may be that teachers' use of different forms of feedback is somewhat determined by their own theory of intelligence. For example, Rattan, Good and Dweck (2012) found that individuals asked to play the role of teacher were more likely to use person feedback when they held an entity theory of intelligence. The researchers also found that students in teaching roles who held an entity theory were more likely to use person feedback following failure. In a case study, Rissanen, Kuusisto, Hanhimäki and Tirri (2016) found that a teacher

with an entity theory of intelligence was more likely to use person praise. In contrast, a teacher with more of an incremental theory used more process feedback. Therefore, there is reason to predict that more of an entity theory of intelligence will be associated with delivery of more person feedback, while less of an entity theory will be associated with more process feedback.

Perceptions of task difficulty

Task difficulty may also impact how teachers give feedback. However, there is limited literature exploring this. Following success, teachers may be more likely to give praise following a challenging task. Success on difficult tasks may be less expected and therefore teachers may feel it is important to draw attention to the unexpected positive outcome (Meyer, 1992). However, success on a simple task may be expected and teachers may therefore feel less need to commend students for their success. Following failure, it may be that teachers give more feedback following a simple task as they may have expected success and therefore draw attention to the failure as unexpected (Meyer, 1992). However, failure on a challenging task may have been expected and therefore not warrant further comment.

Although more speculative, it is plausible to suggest that task difficulty will influence teachers' choice to give person or process feedback. Brummelman, Thomaes, Overbeek, de Castro, van den Hout and Bushman (2014) found that when adults believed that a child had low self-esteem, they were more likely to give them person praise than when they believed the child had high self-esteem. This pattern was not found for process or other praise. Presumably, the adults felt that person praise would lead the children to develop higher self-esteem. Thus, teachers may give more person feedback following success on a challenging task in order to promote positive self-esteem for a good achievement. However, this is only likely to be seen following success. Teachers are likely to avoid person forms of feedback

following failure, regardless of task difficulty, since person feedback can lead to negative outcomes (Kamins & Dweck, 1999).

The current study

The current study examined the type of feedback (process vs. person) that teachers would say they would deliver following scenarios presenting successes and failures. Our sample consisted of Chinese teachers of English since an opportunity arose to collect data whilst the first author was teaching English in China.

Teachers read six scenarios – three describing successes and three describing failures. After each scenario teachers were asked to rate how difficult the task was (this was not manipulated) and how likely they would be to give feedback. They were then given an example of person feedback and an example of process feedback and asked to rate how likely they would be to deliver each to the student. Teachers also completed measures of their theory of intelligence.

It was hypothesised that:

H1: Teachers would be more likely to say that they would give feedback following success than failure.

H2: Teachers would endorse the use of person and process feedback interchangeably following success.

H3: Teachers would endorse the use process feedback following failure.

H4: Teachers with more of an entity theory of intelligence would state that they would give more person forms of praise and criticism.

H5: Teachers would state that they would give more feedback following an unexpected result (i.e., failing on an easy task and succeeding in a challenging task). Conversely, we expected that teachers would say that they would give more person forms of feedback following success on a challenging task and less person forms following any failure.

Method

Participants and Design

Participants were 169 Chinese primary school teachers attending an English Summer School that aimed to improve teaching skills. All teachers taught English among other subjects at their schools and attended the course to improve English skills and learn 'Western' teaching techniques. Most participants were female, ($N=156$) and ages ranged from 21 to 45 ($M=29.46$, $SD=5.21$). All participants were Chinese and English was their second language. The design was fully within participants; all participants read six scenarios and responded to all four dependent measures following each. The performance of the student was manipulated to give an IV with two levels (success or failure). Another variable was a teachers' view of intelligence as fixed or malleable. The four dependent measures were: perceptions of task difficulty, likelihood of giving feedback, and likelihood of giving person and process forms of feedback.

Materials and Procedure

The questionnaire was administered in English. All teachers had a good level of English proficiency as this was part of the selection process in determining attendance at the Summer School. All teachers were given six scenarios to read, each depicting a different lesson (e.g. English, Maths, Science). Teachers were informed that the child described in the scenario was around nine years old and an average student. Additionally they were told that a different child featured in each scenario and the child was never referred to by name or gender to try to prevent these variables from becoming confounds. Each scenario described a lesson where the teacher asked the child to complete a task. We attempted to ensure tasks were of a similar difficulty level across each scenario. However, teachers could draw their own inferences about task difficulty. In three of the tasks the child succeeded and in three tasks they failed. Which lessons children succeeded in and which they failed in, as well as

the order they were presented, were counterbalanced between participants. An example scenario follows (others are available in Appendix A):

“One day you set your students some very difficult problems in Maths. They had never done them before so you carefully explained how to do them.

After showing the class some examples on the board you gave everyone five problems to practice on.

When you gave their work back you saw that one of your students got all 5 out of 5 correct.

OR

When you gave their work back you saw that one of your students only got 1 out of 5 correct.”

Having read each scenario, teachers were asked four questions. These were: “How hard was this task?” and “How likely would you be to give the child feedback?” Additionally for each scenario teachers were given one example of person feedback, (e.g., “You’re really clever” or “You’re not so good at this”) and one example of process feedback (e.g., “You worked really hard on this” or “You didn’t work very hard on this”) and asked “How likely would you be to say...?”. These items were answered on a six point scale. Praise was given following success and criticism was given following failure. Three different forms of person and process praise were used so that the wording of praise would not be repeated, and the order of these forms of feedback was counterbalanced. Whether person or process praise was presented first was also counterbalanced within participants.

Teachers also completed measures of their theory of intelligence (Dweck, 1999) which focussed solely on entity views of intelligence. Even for those who endorse more of an entity theory of intelligence, there is a strong tendency to endorse items depicting the opposite, incremental theory (Hong, Chiu, Dweck, Lin & Wan 1999). This suggests that

incremental theories are compelling and perhaps also socially desirable and it is therefore better to only use entity questions. An example question is “You have a certain amount of intelligence and you really can’t do much to change it.” Participants responded on a six-point agreement scale.

Once participants had given their informed consent they read the six scenarios and answered questions on each. They then completed theory of intelligence measures. Once they had completed the study they were thanked, given a written debrief and the study was discussed as part of a reflection around effective feedback delivery.

Results

Likelihood of Giving Feedback

There were no significant differences in participants’ responses to the dependent measures on the individual success scenarios so the mean across all success scenarios where participants had responded was used. In the same way, the mean of all failure scenarios was also computed. The likelihood of teachers giving feedback following success was compared to the likelihood that they would deliver feedback following failure. Results from this paired samples t-test were significant, suggesting that teachers were more likely to give feedback following success than failure: for success ($M=4.76, SD=.81$) and failure ($M=4.53, SD=.94$) $t(165)=2.91, p = .004$. This supports Hypothesis 1.

The likelihood of teachers giving different forms of feedback following success and failure was also examined using a within-participants repeated measures ANOVA. We calculated the means for success and failure but removed data from participants who stated that they would be ‘very unlikely’ to give feedback having read a scenario. We did include data from scenarios when participants stated that they were ‘unlikely’ to give feedback, as the participants did show a range of responses to the person and process forms of feedback presented. As predicted (Hypothesis 2), following success, teachers used person and process

forms of feedback interchangeably $F(1,165)=3.12, p=.079$ (person feedback $M=4.75, SD=.97$, process feedback $M=4.63, SD=.95$). In contrast, and supporting Hypothesis 3, following failure teachers were more likely to give process feedback than person feedback $F(165)=71.10, p<.001$ (person feedback $M=2.26, SD=.94$, process feedback $M=2.99, SD=1.16$).

Theory of intelligence

Teachers' answers to each of the three questions were averaged to give a mean score for theory of intelligence ($\alpha = .82$). We then explored the correlation between teachers' view of intelligence and their feedback delivery. We had predicted that those with more of an entity theory would deliver more person praise and criticism (Hypothesis 4). We found a no relationship between holding more of an entity theory of intelligence and delivering praise. However, teachers who held more of an entity theory of intelligence indicated that they would give more person, ($r=.13, n=167, p=.043$) and process praise ($r=.18, n=167, p=.009$). Following failure, however, there was no correlation between theory of intelligence and delivery of feedback or delivery of person feedback. However, there was a negative correlation between entity theory of intelligence and delivery of process feedback ($r=-.13, n=168, p=.047$). Hypothesis 4 was therefore not supported.

Perceived task difficulty

We also examined how perceptions of task difficulty correlated with likelihood of giving feedback. Some participants did not answer this question so there is missing data. Following success, results suggested that there was a positive correlation between perceived task difficulty and delivery of praise ($r=.29, n=143, p<.000$). In addition, there was a positive relationship between perceived task difficulty and delivery of person praise ($r=.19, n=143, p=.011$) and delivery of process praise ($r=.17, n=143, p=.023$).

Following failure, results suggested that there was a positive correlation between giving feedback and perceived task difficulty ($r=.25, n=148, p=.002$) contrary to Hypothesis 5. However, the correlations between perceived task difficulty and person feedback and perceived task difficulty with process feedback were not significant suggesting that task difficulty was not associated with type of feedback delivery.

Discussion

It was hypothesised that teachers would be more likely to give feedback following success than failure, and this was supported by our findings. We also found, that teachers used person and process feedback interchangeably following success but used process feedback more following failure. Further, we found that having more of an entity theory was not associated with giving more praise following success. However, it was associated with giving more person and process praise and less process criticism following failure. Finally, perceptions of task difficulty was associated with teachers giving more feedback following challenging tasks, compared to easy tasks, and following success, more challenging tasks were associated with the delivery of more person and process feedback. Our findings therefore have extended our understanding of Dweck's feedback framework by providing insight into how teachers may choose to deliver feedback and how this is related to their own view of intelligence and task difficulty.

Our findings mirror previous research suggesting that teachers are more likely to give feedback following success than failure (Bond, Smith, Baker, & Hattie, 2000). It has been suggested that following success, we do not often consider the reasons for our performance, but following failure, we are more likely to try to understand why we did not achieve our goal (Heider, 1958; Weiner, 1972). Therefore feedback from teachers following failure is likely to be more useful than feedback following success. This suggests that it may be worthwhile

developing extra training for teachers on the importance of and how to effectively deliver feedback following failure.

Teachers used person and process feedback interchangeably following success. This is in line with other research and suggests that following success, perhaps teachers do not consider their delivery of praise as much as their criticism (Crespo, 2002). Literature suggests that although the impact of person and process praise may not be seen immediately following success, following failure, those who had previously received person feedback showed more of a helpless response (Kamins & Dweck, 1999). Additionally, Zentall & Morris (2010) explored the impact of receiving mixed person and process praise. They found that small amounts of person praise, even when mixed with process praise reduced persistence. Therefore, it is important that teachers consider the longer term impact of their praise. Even small amounts of person praise may be damaging. In addition, children may draw upon this praise to understand future performance.

However, following failure teachers used more process feedback. Process feedback suggests a method of improvement, while person feedback does not, and is therefore more likely to lead to positive outcomes for children. This may suggest that teachers give more attention to their feedback delivery following failure than success in order to reduce the likelihood of negative outcomes. Indeed, it has been found that children who received person criticism disliked their teacher more than those who received process criticism (Skipper & Douglas, 2015). Or it may be the case that teachers are equally aware of their feedback delivery following both success and failure, but believe that both person and process forms are positive following success while process feedback is more positive following failure. Furthermore, in the current study we only explored the impact of theory of intelligence and perceived task difficulty on teachers' ratings of their likelihood of giving different forms of feedback. However, teachers may have a number of different aims when giving feedback,

e.g. to increase self-esteem, address emotional needs, appear credible etc. The level of consideration teachers give to their feedback delivery and the reasons for their choices following successes and failure is therefore an interesting avenue for future research.

Theory of intelligence

Teachers' theory of intelligence had some impact on their feedback delivery. Having more of an entity theory of intelligence was not associated with delivering more praise in general but was associated with delivering more person and process praise. Following failure, however, regardless of theory of intelligence, teachers said they would deliver similar levels of general and person criticism, but those with more of an entity theory endorsed less process criticism. This finding is contrary to results from other studies suggesting that those with an entity theory deliver more person feedback (e.g. Rattan, Good & Dweck, 2012).

It is interesting that holding more of an entity view of intelligence was associated with giving both more person and process praise. Entity theorists may want to draw attention to successes in order to encourage children to attend to their successes as evidence of their ability and do not appear to differentiate between effort and ability praise in doing this. However, following failure, entity theorists were less likely to give process feedback. This could be because entity theorists believe that outcomes are not caused by lack of effort but by lack of ability. However, they may not choose to use person forms of criticism as they are very negative, but may not use process forms either as they do not feel failure is due to lack of effort. Instead, as in the Rissanen, et al. study (2016) they may use 'comforting' person feedback such as. "Don't worry, you can't be good at everything." Similarly, those with less of an entity theory did not give more process criticism, it may be that they gave encouragement rather than criticism following failure, e.g. "Next time, if you try hard you will get it".

Thus, an important limitation of this study is that we gave teachers examples of person and process feedback. It may be that teachers use different wordings for person or process feedback, and our wording may not have one they would personally use. Or perhaps they would not typically use these two forms of feedback and may give more informational feedback, particularly following failure (e.g., “Next time, remember to check for capital letters”) or even product praise e.g. (“Your story does not make sense”; Henderlong Corpus & Lepper, 2007). In addition, following failure we asked teachers to rate their likelihood of delivering criticism in both person and process forms. However, teachers may use more encouraging statements to ensure students focus on their future performance, rather than criticism which directs attention to current performance. Therefore, future research should explore how likely teachers are to deliver a wider range of types of feedback.

Perceived task difficulty

Perceived task difficulty was correlated with greater likelihood of delivering feedback. Following success it is logical that teachers would be more likely to give feedback for more challenging than easy tasks, since the success was unexpected and therefore teachers may want to draw attention to it (Meyer, 1992). However, following failure, teachers were also more likely to give feedback following a challenging task, which was contrary to our predictions. Perhaps teachers view failure on a simple task as an unusual ‘blip’ therefore not requiring feedback. However, they may want to give children feedback following failure on a challenging task, for example to encourage them to take on challenging tasks in future.

Sample

Another factor to consider is that the sample consisted of Chinese teachers. It could be argued that patterns of feedback delivery differ in China compared to other countries such as the USA and UK. For example, previous research has suggested that in Euro-American culture, people often emphasise positive information about themselves and others (Heine,

Kitayama, Lehman, Takata, et al., 2001; Miller, Wang, Sandel, & Cho, 2002). In contrast, in China, modesty is highly valued (Lee, 2001) and therefore people may avoid emphasising positive information about themselves and others (Lee, Xu, Fu, Cameron, & Chen, 2001). Additionally, Chinese people have been found to focus more on failures than successes (Ng, Pomerantz, and Lam, 2007; Heine, et al., 2001; Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997). We may therefore have expected Chinese teachers to give more criticism than praise, but this was not the case in the current study. Furthermore, cross-cultural differences in attribution patterns have been found in that Western parents attribute their children's successes to ability while Chinese parents attribute more to effort levels (Dandy & Nettelbeck, 2002b; Georgiou, 1999a; Shek & Chan, 1999). However, in the current research, Chinese teachers used both ability and effort praise following success.

Taken together, this pattern suggests that Chinese teachers may have been responding in a 'Western' way. Indeed, language and culture are interrelated and "The acquisition of a second language, except for specialized, instrumental acquisition [...], is also the acquisition of a second culture" (Brown, 2007, p. 189). Teachers in our sample had a strong interest in Western culture and teaching styles. They also had very good English language skills. Their responses may have been different to responses in Chinese teachers of other subjects.

Another consideration is that the questionnaire was delivered in English. Answering in English may also have led Chinese teachers to think in a more 'Western' way. For example, Fuhrman, McCormick, Chen, Jiang, Shu, Mao, and Boroditskya (2011) found that participants thought about time differently when they were asked to answer questions in Mandarin or English. Other work also suggests that speakers of different languages tend to think and behave differently depending on the language they are using (Whorf, 1956; Lucy, 1992b; Hill, & Mannheim, 1992).

Therefore, perhaps responding in English activated Western values and responding in Mandarin may have produced different results more in line with Eastern values. Therefore, future research could replicate this study and invite teachers to respond in either English or Mandarin to explore the impact of language. Additionally, it would be interesting to explore feedback delivery of Chinese teachers of other subjects in order to explore cross-cultural differences (or universals) in feedback delivery. This research could also include questions to explore why teachers choose different types of feedback. This would give important insights into how and why feedback delivery might differ across countries.

Limitations

It is important to note some limitations of this work. First, we used vignettes to explore how teachers deliver feedback. Other studies have directly asked teachers about their feedback delivery or have observed teachers within their classroom. Each approach has both strengths and weaknesses. Specifically, teachers may believe that they use praise appropriately and often. However, objective evaluations often find that teachers' actual rates of praise are much lower than self-reports indicate (Anderson & Hendrickson, 2007; Shore, Black, Simpson, & Coombe, 1993, Sutherland, & Wehby, 2001). In addition, when teachers are being observed they may change their behaviours in a socially desirable way, for example by reducing levels of criticism. While in the current study teachers may also have responded in a socially desirable way, they were asked how likely they would be to give different types of feedback following a specific task. This meant that teachers did not need to rate how often they gave feedback in general, which we intended to reduce socially desirable responding. This methodology also allowed us to collect data from a larger sample of teachers. However, future research could explore feedback by recording teachers and examining how often praise and criticism are delivered as well as how often person and process forms are used. This could be done using roaming mic which would be easier to overlook than an observer.

Furthermore, this method would allow exploration of teachers' use of a broader range of feedback (e.g. product, informational or encouragement).

In summary, the current study suggests that teachers give more praise than criticism, use person and process praise interchangeably but use more process than person criticism. Teachers gave more feedback following success than failure and their theory of intelligence and perceived task difficulty impacted how they gave both praise and criticism. Detailed literature explores how children respond to person and process feedback, but we still know very little about how teachers deliver these forms of feedback. Therefore, future research should explore in more detail what feedback teachers give across cultures, and also the reasons underlying their feedback choices.

References

- Anderson, L. F. & Hendrickson, J. M. (2007). Early-career EBD teacher knowledge, ratings of competency importance, and observed use of instruction and management competencies. *Education and Treatment of Children, 30*, 43-65. Doi: [10.1353/etc.2007.0019](https://doi.org/10.1353/etc.2007.0019)
- Baron, R. A. (1990). Environmentally induced positive affect: Its impact on self-efficacy, task performance, negotiation, and conflict. *Journal of Applied Social Psychology, 2*, 368-384. Doi: [10.1111/j.1559-1816.1990.tb00417.x](https://doi.org/10.1111/j.1559-1816.1990.tb00417.x)
- Bond, L., Smith, T., Baker, W. & Hattie, J. (2000). The Certification System of the National Board for Professional Teaching Standards: A construct and consequential validity study. *Greensboro, NC: Center for Educational Research and Evaluation, University of North Carolina.*
- Briggs, D. C. (1970). *Your child's self-esteem*. New York: Doubleday.
- Brown, H. D. (2007). *Principles of language learning and teaching*. New York, NY: Pearson Education.
- Brophy, J. E. (1981). Teacher Praise: A Functional Analysis. *Review of Educational Research, 51*, 5-32. Doi: [10.3102/00346543051001005](https://doi.org/10.3102/00346543051001005)
- Burnett, P. C. (2001). Elementary students' preferences for teacher praise. *Journal of Classroom Interaction, 36*, 16-23. Doi: [10.1080/01443410120101215](https://doi.org/10.1080/01443410120101215)
- Burnett, P. C. (2002). Teacher Praise and feedback and students' perceptions of the classroom environment. *Educational Psychology, 22*, 1-16. Doi: [10.1080/01443410120101215](https://doi.org/10.1080/01443410120101215)
- Brummelman, E., Thomaes, S., Overbeek, G., de Castro, B., van den Hout, M. & Bushman, B. J. (2014). On feeding those hungry for praise: Person praise backfires in children with low self-esteem. *Journal of Experimental Psychology, 143*, 9-14. Doi: [10.1037/a0031917](https://doi.org/10.1037/a0031917)
- Crespo, S. (2002). Praising and correcting: prospective teachers investigate their teacherly talk. *Teaching and Teacher Education, 18*, 739-758. Doi: [10.1016/S0742-051X\(02\)00031-8](https://doi.org/10.1016/S0742-051X(02)00031-8)

- Dandy, J. & Nettelbeck, T. (2002b). Research note: A cross-cultural study of parents' academic standards and educational aspirations for their children. *Educational Psychology, 22*, 621-627.
- Delin, C. R. & Baumeister, R. F. (1994). Praise: More Than Just Social Reinforcement. *Journal for the Theory of Social Behaviour, 24*, 219-241. Doi: [10.1111/j.1468-5914.1994.tb00254.x](https://doi.org/10.1111/j.1468-5914.1994.tb00254.x)
- Dweck, C. S. (1999). *Self-theories: Their role in motivation, personality and development*. Philadelphia: Psychology Press.
- Fuhrman, O., McCormick, K., Chen, E., Jiang, H., Shu, D., Mao, S. & Boroditsky, L. (2011). How linguistic and cultural forces shape conceptions of time: English and Mandarin time in 3D. *Cognitive Science, 35*, 1305-28. Doi: [10.1111/j.1551-6709.2011.01193.x](https://doi.org/10.1111/j.1551-6709.2011.01193.x)
- Georgiou, S. N. (1999a). Achievement attributions of sixth grade children and their parents. *Educational Psychology, 19*, 399-412. Doi: [10.1080/0144341990190402](https://doi.org/10.1080/0144341990190402)
- Gross, J. J. & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology, 85*, 348-362. Doi: [10.1037/0022-3514.85.2.348](https://doi.org/10.1037/0022-3514.85.2.348)
- Hattie, J. (2010). On Being a 'Critic and Conscience of Society': The Role of the Education Academic in Public Debates. *New Zealand Journal of Educational Studies, 45*, 85.
- Hattie, J. (2009). *Visible learning: A synthesis of 800+ meta-analyses on achievement*. Routledge, Oxford, UK.
- Heider, F. (1958). *The Psychology of Interpersonal Relations*. New York: Wiley.
- Heine, S. J., Kitayama, S., Lehman, D. R., Takata, T., Ide, E., Leung, C. & Matsumoto, H. (2001). Divergent consequences of success and failure in Japan and North America: An investigation of self-improving motivations and malleable selves. *Journal of Personality and Social Psychology, 81*, 599-615. Doi: [10.1037/0022-3514.81.4.599](https://doi.org/10.1037/0022-3514.81.4.599)

- Heller, K. A. & Eccles-Parsons, J. (1981). Sex differences in teacher's evaluative feedback and students' expectancies for success in mathematics. *Child Development*, 52, 1015-1019. Doi: [10.2307/1129106](https://doi.org/10.2307/1129106)
- Henderlong Corpus, J. & Lepper, M. (2007). The effects of person versus performance praise on children's motivation: Gender and age as moderating factors. *Educational Psychology*, 27, 487-508. Doi: [10.1080/01443410601159852](https://doi.org/10.1080/01443410601159852)
- Henderson, V. & Dweck, C. S. (1990). Achievement and motivation in adolescence. A new model and data. In S. F. G. Elliot (Ed.), *At the threshold: The developing adolescence*. Cambridge, MA: Harvard University Press.
- Heyman, G. D., Fu, G., Sweet, M. A. & Lee, K. (2009). Children's reasoning about evaluative feedback. *British Journal of Developmental Psychology*, 27, 875–890. Doi: [10.1348/026151008X390870](https://doi.org/10.1348/026151008X390870)
- Hill, J. H. & Mannheim, B. (1992). Language and World view. *Annual Review of Anthropology*, 21, 381–406. Doi: [10.1146/annurev.an.21.100192.002121](https://doi.org/10.1146/annurev.an.21.100192.002121)
- Hong, Y., Chiu, C., Dweck, C. S., Lin, D. M. S., & Wan, W. (1999). Implicit theories, attributions, and coping: A meaning system approach. *Journal of Personality and Social Psychology*, 77, 588–599. Doi: [10.1037//0022-3514.77.3.588](https://doi.org/10.1037//0022-3514.77.3.588)
- Hyland, F., & Hyland, K. (2001). Sugaring the pill: Praise and criticism in written feedback. *Journal of Second Language Writing*, 10, 185-212. Doi: [10.1016/S1060-3743\(01\)00038-8](https://doi.org/10.1016/S1060-3743(01)00038-8)
- Kamins, M. L. & Dweck, C. S. (1999). Person versus process praise and criticism: Implications for contingent self-worth and coping. *Developmental Psychology*, 35, 835-847. Doi: [10.1037/0012-1649.35.3.835](https://doi.org/10.1037/0012-1649.35.3.835)
- Kitayama, S., Markus, H. R., Matsumoto, H., & Norasakkunkit, V. (1997). Individual and collective processes in the construction of the self: Self-enhancement in the United States and self-criticism in Japan. *Journal of Personality and Social Psychology*, 72, 1245-1267. Doi: [10.1037/0022-3514.72.6.1245](https://doi.org/10.1037/0022-3514.72.6.1245)

- Koestner, R., Zuckerman, M. & Koestner, J. (1987). Praise, involvement, and intrinsic motivation. *Journal of Personality and Social Psychology*, 53, 383-390. Doi: [10.1037/0022-3514.53.2.383](https://doi.org/10.1037/0022-3514.53.2.383)
- Lam, S., Yim, P. & Ng, Y. (2008). Is effort praise motivational? The role of beliefs in the effort-ability relationship. *Contemporary Educational Psychology*, 33, 694-710. Doi: [10.1016/j.cedpsych.2008.01.005](https://doi.org/10.1016/j.cedpsych.2008.01.005)
- Lucy, J. A. (1992b) *Language Diversity and Thought: A Reformulation of the Linguistic Relativity Hypothesis*. Cambridge: Cambridge University Press.
- Lyster, R. & Ranta, L. (1997). Corrective feedback and learner uptake: Negotiation of form in communicative classrooms. *Studies in Second Language Acquisition*, 19, 37-66. Doi: [10.1017/S0272263197001034](https://doi.org/10.1017/S0272263197001034)
- Mangels, J. A., Butterfield, B., Lamb, J., Good, C. D., & Dweck, C. S. (2006). Why do beliefs about intelligence influence learning success? A social-cognitive-neuroscience model. *Social, Cognitive, and Affective Neuroscience*, 1, 75–86. Doi: [10.1093/scan/nsl013](https://doi.org/10.1093/scan/nsl013)
- Meyer, W. (1992). Paradoxical effects of praise and criticism on perceived ability. In W. Stroebe & M. Hewstone (Eds.), *European Review of Social Psychology*, 3, 259-283. Doi: [10.1080/14792779243000087](https://doi.org/10.1080/14792779243000087)
- Mueller, C. M., & Dweck, C. S. (1998). Praise for intelligence can undermine children's motivation and performance. *Journal of Personality and Social Psychology*, 75, 33-52. Doi: [10.1037/0022-3514.75.1.33](https://doi.org/10.1037/0022-3514.75.1.33)
- Ng, F. F., Pomerantz, E. & Lam, S. (2007). European American and Chinese parents' responses to children's success and failure: Implications for children's responses. *Developmental Psychology*, 43, 1239-1255. Doi: [10.1037/0012-1649.43.5.1239](https://doi.org/10.1037/0012-1649.43.5.1239)
- Nussbaum, A. D., & Dweck, C. S. (2007). Defensiveness vs. remediation: Self-theories and modes of self-esteem maintenance. *Personality and Social Psychology Bulletin*, 34, 599-612. Doi: [10.1177/0146167207312960](https://doi.org/10.1177/0146167207312960)

- Podsakoff, P. M. & Fahr, J. L. (1989). Effects of feedback sign and credibility on goal setting and task performance. *Organizational behaviour and human decision making processes*, 44, 45-67. Doi: [10.1016/0749-5978\(89\)90034-4](https://doi.org/10.1016/0749-5978(89)90034-4)
- Rattan, A., Good, C. & Dweck, C. S. (2012). “It’s ok — Not everyone can be good at math”: Instructors with an entity theory comfort (and demotivate) students. *Journal of Experimental Social Psychology*, 48, 731–737. Doi: [10.1016/j.jesp.2011.12.012](https://doi.org/10.1016/j.jesp.2011.12.012)
- Rhodewalt, F. (1994). Conceptions of ability, achievement goals, and individual differences in self-handicapping behaviour: On the application of implicit theories. *Journal of Personality*, 62, 67–85. Doi: [10.1111/j.1467-6494.1994.tb00795.x](https://doi.org/10.1111/j.1467-6494.1994.tb00795.x)
- Rissanen, I., Kuusisto, E., Hanhimäki, E. & Tirri, K. (2016). Teachers’ implicit meaning systems and their implications for pedagogical thinking and practice: A case study from Finland. *Scandinavian Journal of Educational Research*, 1-14. Doi: [10.1080/00313831.2016.1258667](https://doi.org/10.1080/00313831.2016.1258667)
- Schunk, D. H. (1994). Self-regulation of self-efficacy and attributions in academic settings. In D.H. Schunk & B.J. Zimmerman (Eds.), *Self-regulation of learning and performance: Issues and educational applications* (pp. 75-99). Hillsdale, NJ: Erlbaum.
- Shek, D. T. L. & Chan, L. K. (1999). Hong Kong Chinese parents' perceptions of the ideal child. *Journal of Psychology*, 133, 291-302. Doi: [10.1080/00223989909599742](https://doi.org/10.1080/00223989909599742)
- Shore, S., Black, A., Simpson, A. & Coombe, M. (1993). *Positively different: Guidance for developing inclusive adult literacy, language, and numeracy curricula*. Canberra, Australia: Department of Employment, Education, and Training. ED 371 112.
- Skipper, Y., & Douglas, K. M. (2015). The Influence of Feedback on Children’s Perceptions of Student-Teacher Relationships. *British Journal of Educational Psychology*, 85, 276-288. Doi: [10.1111/bjep.12070](https://doi.org/10.1111/bjep.12070)
- Skipper, Y., & Douglas, K. M. (2012). Is no praise good praise? Effects of positive feedback on children’s responses to subsequent failures. *British Journal of Educational Psychology*, 82, 327-399. Doi: [10.1111/j.2044-8279.2011.02028.x](https://doi.org/10.1111/j.2044-8279.2011.02028.x)

- Sutherland, K. S. & Wehby, J. H. (2001). The effects of self-evaluation on teaching behaviors in classrooms for students with emotional and behavioural disorders. *Journal of Special Education*, 35, 161-171. Doi: [10.1177/002246690103500306](https://doi.org/10.1177/002246690103500306)
- Twenge, J. M. (2006). *Generation Me: Why today's young Americans are more confident, assertive, entitled - And more miserable than ever before*. New York: Free Press.
- Veiga, J. E. (1988). Face your problem subordinates now! *Academy of Management Executive*, 2, 145-152. Doi: [10.5465/AME.1988.4275528](https://doi.org/10.5465/AME.1988.4275528)
- Weiner, B. (1972). Attribution theory, achievement motivation, and the educational process. *Review of educational research*, 42, 203-215. Doi: [10.3102/00346543042002203](https://doi.org/10.3102/00346543042002203)
- Wheldall, K. & Beaman, R. (1994). An evaluation of the WINS (Working Ideas for Need Satisfaction) training package. Report submitted to the New South Wales Department of School Education, 1993 (Special Education Centre, Macquarie University), *Collected Original Resources in Education*, 18.
- Whorf, B. (1956). John B. Carroll (ed.) *Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf*. Michigan, MIT Press.
- Zentall, S. R. & Morris, B. J. (2010). "Good job, you're so smart". The effects of inconsistency of praise type on young children's motivation. *Journal of Experimental Child Psychology*, 107, 155-163. Doi: [10.1016/j.jecp.2010.04.015](https://doi.org/10.1016/j.jecp.2010.04.015)