

## Perceptions of feedback and engagement with feedback among undergraduates: an educational identities approach

Sarah E. Rose, Louise Taylor & Siân E. Jones

**To cite this article:** Sarah E. Rose, Louise Taylor & Siân E. Jones (22 Aug 2024): Perceptions of feedback and engagement with feedback among undergraduates: an educational identities approach, *Assessment & Evaluation in Higher Education*, DOI: [10.1080/02602938.2024.2390933](https://doi.org/10.1080/02602938.2024.2390933)

**To link to this article:** <https://doi.org/10.1080/02602938.2024.2390933>



© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 22 Aug 2024.



Submit your article to this journal [↗](#)



Article views: 1133






View related articles [↗](#)



View Crossmark data [↗](#)

# Perceptions of feedback and engagement with feedback among undergraduates: an educational identities approach

Sarah E. Rose<sup>a</sup> , Louise Taylor<sup>b</sup>  and Siân E. Jones<sup>c</sup> 

<sup>a</sup>Psychology, Staffordshire University, Stoke-on-Trent, UK; <sup>b</sup>Sport, Health Sciences and Social Work, Oxford Brookes University, Oxford, UK; <sup>c</sup>Psychology, Sociology and Education, Queen Margaret University, Edinburgh, UK

## ABSTRACT

Engaging with feedback has been widely shown to support learning, but levels of engagement with feedback among individual students varies considerably. This study assessed educational identities to understand this variation, while also seeking to confirm the distinct but related role of perceptions of feedback. One hundred and seventy undergraduate students in the UK completed an online questionnaire to assess their perceptions of feedback, engagement with feedback, learner identity, consumer identity, and discipline identity, as well as provide age, gender, ethnicity, and level of study. As predicted, perceptions of feedback was significantly positively correlated with engagement with feedback, and learner identity and discipline identity were also significantly positively correlated with perceptions of feedback and engagement with feedback. Data were subsequently analysed to test various hypotheses about the interactions among these variables. Critically, we found support for the proposed mediating effect of perceptions of feedback on the relation between learner identity and engagement with feedback, however, consumer identity did not moderate this effect. These findings suggest that students who demonstrate the greatest engagement with feedback are those with a strong learner identity, thus, interventions to promote learner identity may increase students' engagement with feedback and ultimately improve their outcomes.

## KEYWORDS

Feedback engagement; perceptions of feedback; learner identity; consumer identity; discipline identity

Educators spend considerable time providing students with feedback, usually in the form of written comments on assessments (Carless 2006). Educators may perceive that this is time well spent, because feedback has been identified to be one of the biggest influences on students' academic success (Hattie and Timperley 2007; Wisniewski, Zierer, and Hattie 2019). However, it is becoming increasingly recognised that it is students' engagement with this feedback that is key to their success (Handley, Price, and Millar 2011; Winstone et al. 2017; Carless 2022), yet, student engagement with feedback is often disappointingly low (Carless 2006; Ali, Ahmed, and Rose 2018; Yu et al. 2021). Furthermore, students often do not believe that it is useful to them because they perceive that it lacks detail, and is received too long after the work was completed (Deeley et al. 2019). This has resulted in recommendations being made regarding the delivery methods and modes of the feedback, and on the responsibility of the educator to provide constructive and

**CONTACT** Louise Taylor  [louise.e.taylor@brookes.ac.uk](mailto:louise.e.taylor@brookes.ac.uk)  Sport, Health Sciences and Social Work, Oxford Brookes University, Jack Straws Lane, Oxford, OX3 0FL, UK

© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group  
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

detailed feedback (O'Donovan, Price, and Rust 2008; Nash and Winstone 2017; Haughney, Wakeman, and Hart 2020). The goal of these recommendations is to improve students' perceptions of feedback and thereby their engagement with it. However, the much-assumed positive relation between perceptions of feedback and engagement with feedback has not been directly tested, thus the first aim of the current study was to test this assumption. In addition, relatively little is known about factors related to the students themselves, as opposed to the feedback, that may influence both their feedback perceptions and engagement. The second aim of the current study was, therefore, to examine how students' educational identities may interact with their perceptions of feedback and engagement with feedback.

## Predictors of perceptions of feedback and engagement with feedback

Students' perceptions of feedback depend on their appreciation of the function of feedback and its potential to improve their future performance (Hattie and Timperley 2007). Perceptions also depend on the timeliness of the feedback, its nature and tone, and feedback content (Higgins, Hartley, and Skelton 2001; Carless 2006; Jönsson et al. 2019). If feedback is not perceived as useful by students, it is unlikely to impact their subsequent work (Lipnevich and Smith 2009) because their perceptions will determine their affective, cognitive, and behavioural responses to it (Van der Kleij and Lipnevich 2021). Jonsson's (2013) review of 103 studies focusing on barriers and facilitators to students using feedback confirmed the potential role of perceptions of feedback as influencing student engagement with feedback; however, this link between perception and engagement remains to be empirically tested.

Many interventions have been developed with the aim of increasing students' perceptions of feedback in order to try and improve their engagement with it. These also assume that if feedback is perceived more positively, students will be more likely to engage with it. Winstone et al. (2017) reviewed 105 evaluations of such interventions. While these were generally reported to increase student self-reported engagement with feedback, difficulties were also described; for example, some learners did not fully engage with the interventions. Furthermore, Winstone et al. (2017) commented that the students who committed themselves to these interventions were often those who were already highly motivated and likely to be achieving good levels of academic success.

Compared to the attention given to identifying features of the feedback that have the potential to increase students' perceptions of its usefulness and their engagement with it, little attention has been given to individual differences pertaining to students themselves. It is important to consider these because this will provide evidence to increase our understanding of differences in the extent to which individual students perceive feedback as useful and worth engaging with. This information may also be used to create feedback interventions to support students who may be least likely to engage with the feedback they receive.

There is some indication that individual differences in situational and demographic factors affect students' perceptions of feedback. For example, two studies have found that students' perceptions become more negative as they progress through their degrees (Scott, Badge, and Cann 2009; Ali, Ahmed, and Rose 2018). However, in contrast, Rowe and Wood (2008) found that students' perceptions remained consistent across the three years of their degrees. In terms of gender, again findings are mixed: while Ali, Ahmed, and Rose (2018) found no differences in perceptions of feedback or engagement with feedback between males and females, other studies reported that females have more positive perceptions of feedback compared to males (Rowe and Wood 2008; Alhaysony 2016; Pitt and Winstone 2018). Finally, age has not been found to be related to students' perceptions of feedback or engagement with feedback (Ali, Ahmed, and Rose 2018) and we know of no peer-reviewed research that examines the impact of ethnicity. In relation to these limited and sometimes contradictory findings, in the current study we conducted exploratory analysis to examine the possible impact of these factors on perceptions of feedback and engagement with feedback within our sample.

## **An educational identities approach**

An alternative approach to investigating individual differences in students' perceptions of feedback and engagement with feedback involves examining psychological factors, such as those associated with educational identities. When we look at students' engagement with learning more broadly, we see increasing evidence that the strength of their identities as 'learners' and educational 'consumers' are important (Bliuc et al. 2011; Lund Dean and Jolly 2012; Martin et al. 2014; Bunce and Bennett 2021). Identities, or our self-concepts, influence our attitudes, values, beliefs, and goals, and ultimately our behaviour. Our identities describe the ways in which we view ourselves, and they help us to make sense of the world around us (Haslam 2017). Some aspects of our self-concept can be defined with reference to others around us (e.g. psychology student or University of Oxford student). These social aspects of identity carry norms, or 'templates', for behaviour, in other words, ideas of how other group members think and behave. Knowing these norms increases the predictability of other members of the group: the stronger a person's sense of identification with a particular group, the more likely they are to act in ways that are consistent with perceived group norms (Rathbone et al. 2023). In an education context, the more that a student identifies with their student body, the more likely they are to behave in line with their perception of the group norms of that body (Smyth et al. 2015). For example, if attendance in class is taken very seriously by students in a particular discipline, and a student identifies strongly as a member of their discipline, then it is more likely that the student themselves will attend classes.

Empirical evidence for a link between student identities and attainment was provided by Bliuc et al. (2011) and Platow, Mavor, and Grace (2013). They found that students for whom being a member of their discipline (in both cases psychology) was central to their identity, achieved higher grades than students for whom discipline identity was less central. This relation could be explained by approaches to learning: students with a strong discipline identity were more likely to adopt a deep approach to learning (characterised by an intention to make meaning and connect new knowledge with existing knowledge) than a surface approach (selective processing of information to meet task requirements, such as rote memorisation). This suggests that students who have a stronger discipline identity may be more likely to have positive perceptions of feedback and engagement with it.

The extent to which students identify more broadly as learners and/or educational consumers has also been shown to impact attainment. Bunce, Baird, and Jones (2017) measured the strength of students' identities as learners and consumers in a multi-disciplinary and multiple university survey of over 600 tuition fee-paying students in England, UK. They measured learner identity broadly in terms of studying motivations (e.g. studying because it is inherently enjoyable versus to obtain an external reward of a degree), studying behaviours/engagement (e.g. taking notes, attending classes), and approaches to learning (e.g. using deep approaches). Consumer identity was measured following Saunders (2015) higher education customer orientation scale, which assesses students' academic beliefs (e.g. 'For the most part, education is something I receive, not something I create') and educational priorities (e.g. 'The main purpose of my college education should be maximizing my ability to earn money'). Bunce, Baird, and Jones (2017) found important relations between students' identities as learners and consumers and their self-reported attainment. As predicted, learner and consumer identity were negatively correlated, but learner identity was positively correlated with attainment, and consumer identity was negatively correlated with attainment. They also found that when consumer identity was taken into account, the positive relation between learner identity and attainment reduced. In a follow-up study using a similar sample, Bunce and Bennett (2021; see also Taylor-Bunce, Bennett, and Jones 2022) also showed that a consumer identity was negatively related to attainment, and approaches to learning mediated this relation: a stronger consumer identity was less likely to be associated with deep approaches to learning and more likely to be associated with surface approaches to

learning, thus helping to explain the negative relation between consumer identity and attainment. Finally, Jones, Taylor, and Johnson (2024) confirmed the negative impact of consumer identity on the relation between students' identities as members of their discipline and attainment in Scotland (a non-fee-paying context) in a sample of students traditionally under-represented at university (e.g. students from the global ethnic majority, first in family to attend university, mature students, etc). They found that there was a positive relation between discipline identity and attainment when these students had a weaker (-1 SD) consumer identity, but when they had a stronger (+1 SD) consumer identity, this relation disappeared. Thus, consumer identity moderated the relation between identity and attainment in this sample, and the findings provide further evidence of the impact of competing identities on attainment.

### **Current study**

These empirical findings led us to test several predictions about how students' identities as learners and educational consumers may relate to their perceptions of feedback and engagement with feedback. Given that engagement with feedback is correlated with attainment (Brown, Peterson, and Yao 2016; Adams et al. 2020), we assumed that the findings from studies on identities and attainment, as discussed above, would provide a useful empirical and theoretical basis for making the following hypotheses. Note that while we assessed both discipline identity and learner identity, these variables were highly correlated. Therefore, the analysis reported focused on the potentially interacting effects of learner identity and consumer identity on perceptions of feedback and engagement with feedback, while controlling for discipline identity.

We hypothesised that learner identity would be positively related to both perceptions of feedback and engagement with feedback, and that consumer identity would be negatively related to perceptions of feedback and engagement with feedback. We also expected that there would be a mediation effect of perceptions of feedback on the relation between learner identity and engagement with feedback, i.e. learner identity would be positively related to engagement with feedback because learner identity has a positive impact on perceptions of feedback. We then examined the potential moderation of consumer identity on this mediation model. We hypothesised that when a student's level of consumer identity was high or medium, but not low, the mediating effect of perceptions of feedback on the relation between learner identity and engagement with feedback would be reduced.

### **Hypotheses**

H1a: Perceptions of Feedback will positively predict Engagement with Feedback.

H1b: Learner Identity will positively predict both Perceptions of Feedback and Engagement with Feedback.

H1c: Consumer identity will negatively predict both Perceptions of Feedback and Engagement with Feedback.

H2: Perceptions of Feedback will mediate the relation between Learner Identity and Engagement with Feedback.

H3a: Consumer Identity will moderate the relation between Learner Identity and Engagement with Feedback: at high and medium levels of consumer identity, the relation between these two variables will be weakened, but at low levels of consumer identity the relation will remain.

H3b: Consumer Identity will moderate the extent to which Perceptions of Feedback mediates the relation between Learner Identity and Engagement with Feedback: at high and medium levels of consumer identity, the impact of learner identity on engagement with feedback will be reduced, but at low levels of consumer identity this relation will not be affected.

## Method

### Participants

The survey was accessed by 322 respondents. One-hundred and fifty-two participants were removed due to incomplete, very quick (< 3 min), or unsuitable responses (e.g. they did not confirm they were studying an undergraduate degree in England). This resulted in data from 170 undergraduate students (age range 18–53 years,  $M=26.05$ ,  $SD = 8.44$ ) across multiple universities and multiple disciplines being included. Of the sample, 125 (74%) identified as female, 43 (25%) identified as male, and 2 (1%) identified in another way. In relation to ethnicity, 155 (91%) identified as white, 6 (3.5%) as African, 6 (3.5%) as Asian, and 3 (2%) as being from a mixed ethnic group. Thirty-seven (22%) students were in their first year of study, 98 (58%) in their second year, and twenty-seven (17%) in their final year (8(4%) did not respond to this question). The sample was recruited through social media and emails sent to students by their lecturers. To encourage completion, students were given the opportunity to enter a prize draw to win one of five £10 vouchers at the end of the survey. All participants gave informed consent, and ethical approval was obtained from Staffordshire University Ethics Committee.

### Procedure

All participants accessed the study through a link shared via email or social media. After reading the information sheet and giving informed consent, participants were asked to provide demographic details (age, gender, ethnicity, level of study, and main subject of study). Participants then completed each of the measures described below. At the end of the survey, they were debriefed and offered the opportunity to enter an optional prize draw by providing their email address in a separate online form.

### Measures

Learner Identity was measured using the Motivated Strategies for Learning Questionnaire (sub-scales: Control of Learning Beliefs, Self-Efficacy for Learning and Performance, Intrinsic Goal Orientation, Task Value) (Pintrich et al. 1993). Participants responded to the 23 items on a 7-point scale (1 = not at all true of me, 7 = very true of me), and very good reliability was found (Cronbach's  $\alpha = 0.917$ ).

Discipline Identity was measured using Cameron's (2004) Social Identity Scale. It was adapted for each student according to their reported discipline, for example, 'In a group of [main subject of study] students, I really feel that I belong'. Participants responded to these items on a 6-point scale (1 = not at all true of me, 6 = very true of me), and the reliability of the scale was good (Cronbach's  $\alpha = 0.892$ ).

Consumer Identity was measured using the Customer Orientation Scale (Saunders 2015). Some wording was slightly adapted for a UK context as opposed to an American one. This scale comprises 18 items, to which participants responded on a 5-point scale (1 = strongly disagree, 5 = strongly agree). It had good reliability (Cronbach's  $\alpha = 0.885$ ).

Perceptions of Feedback and Engagement with Feedback were measured using Ali, Ahmed, and Rose's (2018) 26-item scale. Participants responded to each item on a 5-point scale (1 = strongly disagree, 5 = strongly agree). The sub-scale measuring perceptions of feedback contained items relating to the perceived purpose of the feedback, effectiveness, and quality of feedback, while the engagement subscale contained items relating to the activities students undertook with the feedback received (for example reading it, developing action plans, etc). Both subscales had good reliability (Cronbach's  $\alpha$ : Perception = 0.722, Engagement = 0.763).

## Results

The data were checked for outliers, patterns in missing values, and violations of assumptions for parametric data, and no issues were identified. Descriptive statistics and raw correlations for the demographic, situational, and educational identity variables are provided in Table 1. Prior to the main analysis, potential demographic and situational differences in Perceptions of Feedback and Engagement with Feedback were explored. Regarding Gender, there were no significant differences in Perceptions of Feedback or Engagement with Feedback among females compared to males (Perceptions:  $t(55.41) = 1.69, p = 0.096, d = 0.36$ ; Engagement:  $t(57.2) = 1.08, p = 0.284, d = 0.23$ ). There were also no differences according to Year Group (first-, second-, final-year students, Perceptions:  $F(2, 159) = 1.3, p = 0.275, \text{partial } \eta^2 = 0.02$ ; Engagement:  $F(2, 159) = 0.63, p = 0.533, \text{partial } \eta^2 = 0.01$ ). For Ethnicity (white, global ethnic majority) there was no difference for Perceptions,  $F(1, 167) = 0.388, p = 0.534, \text{partial } \eta^2 = 0.02$ , or Engagement,  $F(1, 167) = 0.14, p = 0.901, \text{partial } \eta^2 = .01$ . However, regarding Age, there was a significant positive correlation between Age and Perceptions of Feedback,  $r(169) = 0.19, p = 0.01$ , meaning that with increasing age, feedback was perceived more positively. However, there was no correlation between Age and Engagement with Feedback,  $r(169) = 0.12, p = .134$ . Nonetheless, Age was controlled for in subsequent analyses given its relation with Perceptions of Feedback.

### Predictors of engagement with feedback (Hypotheses 1a, 1b, and 1c)

To test the hypotheses outlined in H1a - H1c, that Perceptions of Feedback, Learner Identity, and Consumer Identity will predict Engagement with Feedback, a multiple linear regression was conducted. This was significant,  $F(3, 168) = 53.03, p < 0.001$ , with  $R^2 \text{ adjusted} = 0.482$ : Perceptions of Feedback was positively related to Engagement with Feedback,  $B = 0.455, p < 0.001$ , thus supporting Hypothesis 1a. The analysis also revealed that Learner Identity was positively related to both Perceptions of Feedback,  $B = 0.445, p < 0.001$ , and Engagement with Feedback,  $B = 0.192, p < 0.001$ , thus supporting Hypothesis 1b. Consumer Identity, however, was not a significant predictor of Perceptions of Feedback,  $B = 0.051, p = 0.250$ , or Engagement with Feedback,  $B = 0.055, p = 0.450$ , thus, Hypothesis 1c was not supported.

### Simple mediation of perceptions of feedback on the relation between learner identity and engagement with feedback (Hypothesis 2)

Next, we examined the potential mediating effect of Perceptions of Feedback on the relation between Learner Identity and Engagement with Feedback, controlling for Age, Discipline Identity

**Table 1.** Descriptive statistics (mean and SD) and correlations between variables.

Variable	Mean (SD)	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Age	26.05(8.44)									
2. Learner Identity	5.57 (0.81)	.170*								
3. Discipline Identity	4.21 (1.03)	.153*	.503**							
4. Consumer Identity	2.68 (0.67)	-0.202*	-0.301**	-0.161*						
5. Perceptions of Feedback	3.82 (0.60)	.195*	.456**	.512**	-0.149					
6. Engagement with Feedback	3.89 (0.52)	.115	.519**	.411**	-0.100	.654**				
7. Gender	-	.050	.007	.153*	.229**	-0.164*	-0.092			
8. Year Group	-	-0.020	-0.069	-0.047	.171*	-0.058	-0.045	-0.010		
9. Ethnicity	-	-0.059	-0.056	.047	.013	-0.048	-0.009	.095	.062	

$N = 170$ , \*correlation is significant at the 0.05 level (two-tailed), \*\*correlation is significant at the 0.01 level (two-tailed).

Gender, 0=Female, 1=Male; Year Group, 1=1<sup>st</sup> year, 2=2<sup>nd</sup> year, 3=Final year; Ethnicity, 0=other, 1=white.

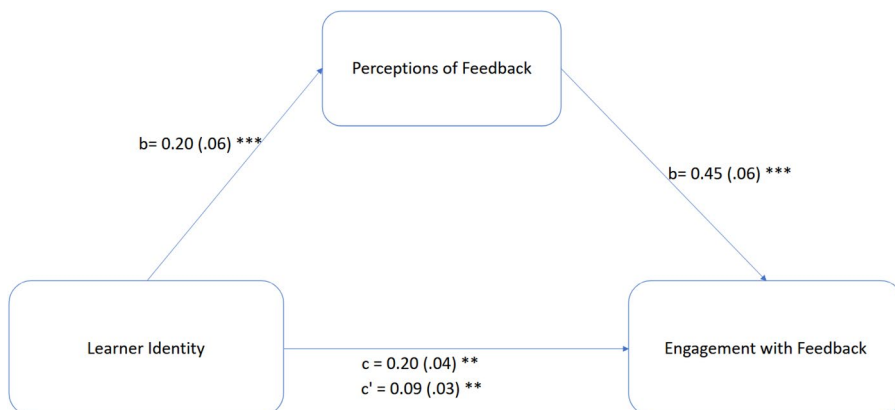


and Consumer Identity (see Figure 1). We used PROCESS Model 4, running the analysis based on 5,000 bootstrap samples to describe the confidence intervals of indirect effects (Preacher and Hayes 2008; Hayes 2009). This determines an indirect effect to be significant when the confidence intervals do not contain a zero, as opposed to the individual paths. Age was not a significant covariate ( $B=0.0068$ , Standard Error,  $SE = 0.0046$ , Lower Level Confidence Interval,  $LLCI=-0.0024$ , Upper Level Confidence Interval,  $ULCI = 0.0160$ ), and nor was Consumer Identity ( $B=-0.0084$ ,  $SE = 0.0606$ ,  $LLCI=-0.1280$ ,  $ULCI = 0.1111$ ), but Discipline Identity was significant ( $B=0.2167$ ,  $SE = 0.0434$ ,  $LLCI = 0.1311$ ,  $ULCI = 0.3024$ ) owing to its positive correlation with Perceptions of Feedback,  $r(169) = 0.19$ ,  $p=.01$ . In spite of the significant effect of Discipline Identity, the data supported Hypothesis 2 whereby Perceptions of Feedback remained a significant mediator of the relation between Learner Identity and Engagement with Feedback ( $B=0.0895$ ,  $SE = 0.0283$ ,  $LLCI = 0.0366$ ,  $ULCI = 0.1493$ ). There was also a direct relation between Learner Identity and Engagement with Feedback in the presence of Perceptions of Feedback ( $B=0.1928$ ,  $SE = 0.0444$ ,  $LLCI = 0.1052$ ,  $ULCI = 0.2805$ ), thus the model indicates partial mediation. In other words, Learner Identity positively predicted Engagement with Feedback because of its positive influence on Perceptions of Feedback. Nonetheless there was also a direct effect, indicating that Learner Identity had its own unique influence on Engagement with Feedback, in addition to the influence it had through Perceptions of Feedback.

### ***Moderated mediation of consumer identity on the relations between learner identity, perceptions of feedback and engagement with feedback (Hypotheses 3a and 3b)***

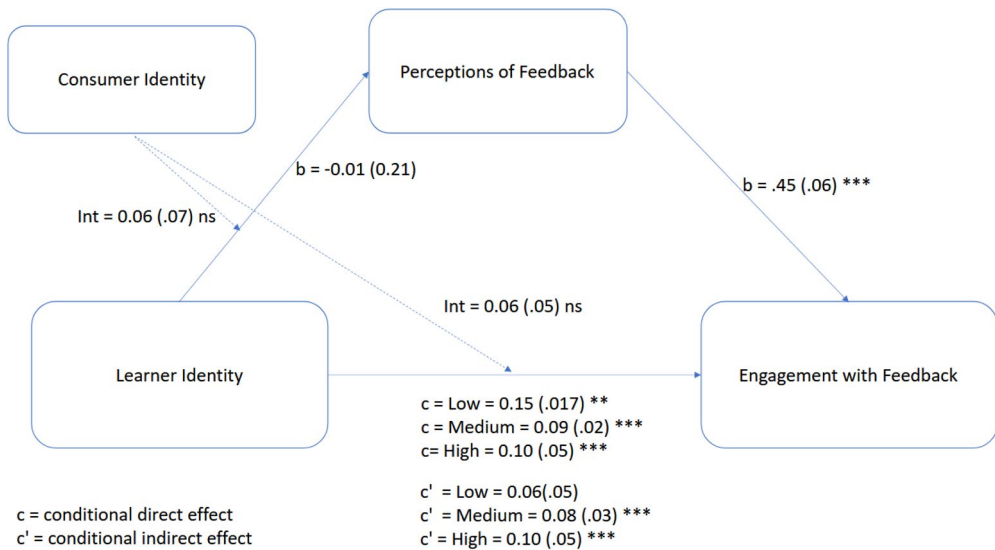
Regression analysis was used to investigate the potential moderating effects of Consumer Identity, as per Hypotheses 3a and 3b (see Figure 2). PROCESS Model 8 was used, with bootstrapping as recommended by Preacher and Hayes (2008). Age and Discipline Identity were entered as covariates, and in all cases these were not significant.

First, we examined the evidence for Hypothesis 3a, that Consumer Identity would moderate the relation between Learner Identity and Engagement with Feedback. There were positive direct effects of Learner Identity on Engagement with Feedback at every level of Consumer Identity (low =  $B=0.1480$ ,  $SE = 0.0616$ ,  $LLCI = 0.0264$ ,  $ULCI = 0.2696$ ; medium =  $B=0.1873$ ,  $SE = 0.0449$ ,  $LLCI = 0.0986$ ,  $ULCI = 0.2759$ ; high =  $B=0.2265$ ,  $SE = 0.0542$ ,  $LLCI = 0.1196$ ,  $ULCI = 0.3335$ ). Therefore, Consumer Identity did not act as a moderator of the relation between Learner Identity and Engagement with Feedback, and Hypothesis 3a was not supported. This was further evidenced within the analysis by the non-significant interaction between Learner Identity



**Figure 1.** Simple mediation of perceptions of feedback on the relation between learner identity and engagement with feedback.





**Figure 2.** Moderated mediation of consumer identity on the relations between learner identity, perceptions of feedback, and engagement with feedback.

and Consumer Identity on Engagement with Feedback ( $B=0.0601$ ,  $SE = 0.0549$ ,  $LLCI = -0.0482$ ,  $ULCI = 0.1684$ ).

The analysis also did not support Hypothesis 3b: Although Perceptions of Feedback was a significant mediator of the relation between Learner Identity and Engagement with Feedback, this was not related to level of Consumer Identity. This is evidenced within our analyses by the non-significant interaction between Learner Identity and Consumer Identity on Perceptions of Feedback ( $B=0.0656$ ,  $SE = 0.0736$ ,  $LLCI = -0.0796$ ,  $ULCI = 0.2108$ ), and by the index of moderated mediation, which was not significant ( $B=0.0320$ ,  $SE = 0.0556$ ,  $LLCI = -0.0505$ ,  $ULCI = 0.1653$ ). Indirect conditional effects at different levels of Consumer Identity showed that at low levels of Consumer Identity,  $B=0.0615$ ,  $SE = 0.0475$ ,  $LLCI = -0.0360$ ,  $ULCI = 0.1479$ , there was mediation through Perceptions of Feedback, but there was no mediation found at medium levels,  $B=0.0828$ ,  $SE = 0.0280$ ,  $LLCI = 0.0331$ ,  $ULCI = 0.1416$ , or at high levels,  $B=0.1042$ ,  $SE = 0.0454$ ,  $LLCI = 0.0331$ ,  $ULCI = 0.215$ , of Consumer Identity. In other words, the moderating effect of Consumer Identity was significant at low levels of Consumer Identity, but it was not significant at medium or high levels. The overall index of moderated mediation was non-significant meaning that the overall moderated mediation hypothesis was not supported.

## Discussion

Increasing student engagement with feedback has the potential to improve educational outcomes, yet our knowledge of what predicts that engagement remains scarce. This study investigated educational identities that were theoretically hypothesised to predict individual differences in perceptions of feedback and engagement with feedback, notably, learner identity, discipline identity, and consumer identity. We found support for our central hypothesis that learner identity would be positively related to perceptions of feedback, which, in turn, was positively related to engagement with feedback, but we did not find support for our hypothesis that a consumer identity would be negatively related to perceptions of feedback and engagement with feedback. We further showed that perceptions of feedback partially mediated the association between learner identity and engagement with feedback, but consumer identity did not moderate this

association. In other words, at high and medium levels of consumer identity, the impact of the strength of learner identity on perceptions of feedback and engagement with feedback remained. In terms of our exploration of demographic and situational factors, we only found a significant positive relation between age and perceptions of feedback, and no relations for gender, ethnicity or level of study. We now discuss each of these findings in turn.

In relation to Hypothesis 1a, we found evidence to support the widely assumed positive influence of perceptions of feedback on engagement with feedback. This suggests that those who have more positive views of the feedback they receive are more likely to report greater engagement with the feedback. Our research makes an important contribution to knowledge here, as although this link between perceptions of feedback and subsequent engagement with it has been assumed, it has not been empirically tested.

As predicted by Hypothesis 1b, we found that the extent to which a student identifies as a 'learner' plays a role in their perceptions of feedback and engagement with feedback. While previous research has focused on the relations between learner identity, approaches to learning, and grades (Bliuc et al. 2011; Platow, Mavor, and Grace 2013), the present study builds on this to suggest an important role of identities in perceptions of feedback and level of engagement with that feedback. Specifically, identifying as a learner was a significant positive predictor of both perceptions of feedback and engagement with feedback. If we consider that an identity provides norms for behaviour, and that a learner identity would encompass norms relating to improving one's own knowledge, it is not surprising that students with a stronger learner identity had more positive perceptions of feedback and greater engagement with feedback.

We further tested the relations between learner identity, perceptions of feedback, and engagement with feedback in a mediation model to explore Hypothesis 2, whereby we predicted that learner identity would be related to engagement with feedback because it supports positive perceptions of feedback (e.g. attitudes such as 'It is useful'). This hypothesis was supported: in other words, learner identity was positively related to perceptions of feedback, which in turn was positively related to engagement with feedback. Therefore, feedback perceptions helped to explain the relation between learner identity and feedback engagement. However, there remained a direct effect of learner identity on engagement with feedback in the presence of perceptions of feedback. This means that learner identity has its own unique influence on engagement with feedback in addition to the influence it has on engagement through perceptions of feedback. This emphasises the importance of a learner identity in predicting engagement with feedback, and extends previous research on the importance of learner identity for academic attainment (Bunce, Baird, and Jones 2017).

The importance of learner identity for engagement with feedback was found even when discipline identity was controlled for. Therefore, although norms among discipline groups can vary regarding the extent to which 'surface' or 'deep' learning approaches are perceived as appropriate (Smyth et al. 2015), our findings suggest that the general norm among students for whom learning is an important part of their self-concept have positive perceptions of feedback and engage with it. Overall, these findings have practical implications from a learning and teaching perspective: rather than developing interventions that are discipline-specific, or that focus specifically on feedback use and students' reactions towards it, energies may well be better spent on strengthening students' self-concepts as learners more broadly.

Turning now to Hypotheses 3a and 3b, we expected that a stronger consumer identity would negatively impact the extent to which students perceived feedback as useful and felt the need to engage with it. This directly relates to the idea that student consumers believe that responsibility for doing well rests more on the educator than on themselves (Saunders 2015). However, we failed to find any evidence of consumer identity moderating the relations between learner identity and engagement with feedback, or between learner identity and perceptions of feedback. In other words, regardless of whether students' consumer identities were strong or weak, the relations between learner identity, perceptions of feedback, and engagement with feedback

were unaffected. This was not what we expected based on previous findings. For example, Bunce, Baird, and Jones (2017) found that a consumer identity 'competed' with a learner identity and reduced the strength of the relation between learner identity and academic performance. Similarly, Jones, Taylor, and Johnson (2024) found a moderating role of consumer identity on the relation between discipline identity and grades. Specifically, they found that among students with a relatively weak consumer identity, there was a positive relation between discipline identity and grades, but that this disappeared when students had a strong consumer identity. However, a caveat to their study was that this relation was found only in a group of students who are traditionally under-represented at university, and there was no moderating effect of consumer identity in the traditional student group. As this variable, traditional vs non-traditional student, was not measured in the current study, we do not know for certain what proportion of our sample were from traditional and non-traditional backgrounds. However, the mean level of consumer identity was comparable to previous research (Bunce, Baird, and Jones 2017; Jones, Taylor, and Johnson 2024), and the sample of students was from a range of institutions and disciplines. Therefore, it remains unclear why consumer identity did not have an effect in our study.

Finally, our research further contributes to previous findings regarding demographic and situational factors that may influence perceptions of feedback and engagement with feedback. We did not find significant differences between males and females, which was in line with Ali, Ahmed, and Rose (2018), but not in line with Rowe and Wood (2008), Alhaysony (2016), or Pitt and Winstone (2018), who found that males had lower engagement than females. Regarding age, we found that age was positively related to perceptions of feedback but not engagement with feedback, whereas Ali, Ahmed, and Rose (2018) found that age was not related to either. Concerning level of study, we did not find a difference in perceptions of feedback or engagement with feedback as a function of whether students were in their first-, second-, or final-year. This supports findings by Rowe and Wood (2008) but contradicts Ali, Ahmed, and Rose (2018) and Scott, Badge, and Cann (2009), who found that perceptions of feedback became more negative with increasing level of study. Finally, our null finding regarding ethnicity is, as far as we know, the first indication that this may not impact students' perceptions of feedback or engagement with feedback. However, our sample was predominantly white, and previous research has emphasised the more negative experiences of students from the global ethnic majority (Bunce et al. 2021), meaning that this finding requires further research with more diverse samples.

### ***Limitations and future research***

The data were collected at a single time-point, and we therefore need to be cautious about making directional inferences; although we focused on the extent to which learner identity predicts perceptions of feedback and engagement with feedback, it is likely that the feedback received, and students' perceptions and engagement with this feedback, will also influence their identity as a learner. To address this, future research could collect data over time to see how learner identity, perceptions of feedback, and engagement with feedback change in a group of students as they progress through their studies. Furthermore, it would be useful to measure students' learner identities and perceptions and engagement with their feedback prior to and after an intervention designed to increase learner identity. This could provide further insight into the extent to which the relation between learner identity and engagement with feedback is causal.

The sample who took part in this study were a self-selecting sample of students attending universities in England, UK. Although most undergraduate students in England pay tuition fees, the amount they are charged and the ways that they pay vary according to where they come from. For example, a student who normally lives in England usually receives a tuition fee loan while a student who normally lives in Scotland, may not be required to directly cover any fees themselves. Consequently, the

sample is not homogeneous in terms of their experience of how their tuition fees are paid, and this could be particularly influential in terms of the extent to which they may identify as consumers of their education. Furthermore, due to the self-selecting nature of the sample, the data reported is from a group of relatively engaged students who generally reported moderately positive perceptions of feedback and engagement with feedback. To extend these findings, collecting data during teaching sessions, like the approach used by Ali, Rose, and Ahmed (2015) and Ali, Ahmed, and Rose (2018), may increase the representativeness of the sample, and therefore our confidence that the findings extend beyond the current sample. Additionally, collecting information about the students' fee-paying status would allow this to be controlled for in subsequent analyses.

### **Practical implications**

Notwithstanding the limitations above, our evidence clearly emphasises the importance of supporting students to develop a strong learner identity to support their engagement with feedback. Our findings are based on a measure of learner identity which asks questions about students' motivation for learning, specifically, their belief that they are responsible for their own learning, their self-efficacy in their ability to learn and do well, their enjoyment and recognition of the value of the content of the course, and intrinsic motivation for their learning. Therefore, an intervention that aims to promote these beliefs is likely to be effective in increasing both perceptions of feedback and engagement with feedback. Interestingly, while we measured both learner identity in this broad sense (in line with Bunce, Baird, and Jones 2017) as well as discipline identity more specifically (e.g. following Bliuc et al. 2011), it was learner identity, not discipline identity, that predicted both perceptions of feedback and engagement with feedback (through both mediation and direct effects), despite the fact that learner identity and discipline identity were highly correlated. This suggests that interventions to increase learner identity do not need to be discipline-specific to be effective in increasing engagement with assessment feedback. This is good news for higher education institutions as it suggests that interventions offered at a university-wide level, for example by study skills specialists, have the potential to be equal to, or even more effective, than more tailored discipline-specific interventions at increasing students' perceptions of feedback and engagement with it.

### **Disclosure statement**

The authors report there are no competing interests to declare.

### **Funding**

This research was supported with a small internal grant awarded to the first author from Staffordshire Centre of Learning and Pedagogic Practice.

### **Notes on contributors**

*Dr Sarah E. Rose* is an Associate Professor of Child Psychology and Education at Staffordshire University. Her pedagogical research focuses on university students' experiences and engagement with assessment feedback, with a particular focus on understanding predictors of engagement and developing interventions to increase engagement.

*Professor Louise Taylor* is a Professor of Education and Student Experience at Oxford Brookes University and National Teaching Fellow. Her research is concerned with supporting students to develop identities that promote engagement and learning.

*Dr Siân E. Jones* is a Senior Lecturer at St Margaret University, Edinburgh. Her research focuses on how group processes underpin learning and learning experiences. She has a particular interest in bullying, discrimination and prejudice among children and adults based on membership of a given group.

## ORCID

Sarah E. Rose  <http://orcid.org/0000-0002-1658-3568>

Louise Taylor  <http://orcid.org/0000-0002-8754-9957>

Siân E. Jones  <http://orcid.org/0000-0002-2399-1017>

## References

- Adams, A. M., H. Wilson, J. Money, S. Palmer-Conn, and J. Fearn. 2020. "Student Engagement with Feedback and Attainment: The Role of Academic Self-Efficacy." *Assessment & Evaluation in Higher Education* 45 (2): 317–329. doi:10.1080/02602938.2019.1640184.
- Alhaysony, M. 2016. "Saudi EFL Preparatory Year Students' Perception about Corrective Feedback in Oral Communication." *English Language Teaching* 9 (12): 47. doi:10.5539/elt.v9n12p47.
- Ali, N., L. Ahmed, and S. Rose. 2018. "Identifying Predictors of Students' Perception of and Engagement with Assessment Feedback." *Active Learning in Higher Education* 19 (3): 239–251. doi:10.1177/1469787417735609.
- Ali, N., S. Rose, and L. Ahmed. 2015. "Psychology Students' Perception of and Engagement with Feedback as a Function of Year of Study." *Assessment & Evaluation in Higher Education* 40 (4): 574–586. doi:10.1080/02602938.2014.936355.
- Bliuc, A. M., R. A. Ellis, P. Goodyear, and D. M. Hendres. 2011. "The Role of Social Identification as University Student in Learning: Relationships between Students' Social Identity, Approaches to Learning, and Academic Achievement." *Educational Psychology* 31 (5): 559–574. doi:10.1080/01443410.2011.585948.
- Brown, G. T. L., E. R. Peterson, and E. S. Yao. 2016. "Student Conceptions of Feedback: Impact on Self-Regulation, Self-Efficacy, and Academic Achievement." *The British Journal of Educational Psychology* 86 (4): 606–629. doi:10.1111/bjep.12126.
- Bunce, L., A. Baird, and S. E. Jones. 2017. "The Student-as-Consumer Approach in Higher Education and Its Effects on Academic Performance." *Studies in Higher Education* 42 (11): 1958–1978. doi:10.1080/03075079.2015.1127908.
- Bunce, L., and M. Bennett. 2021. "A Degree of Studying? Approaches to Learning and Academic Performance among Student "Consumers." *Active Learning in Higher Education* 22 (3): 203–214. doi:10.1177/1469787419860204.
- Bunce, L., Naomi, K. S. Saran, and N. Talib. 2021. "Experiences of Black and Minority Ethnic (BME) Students in Higher Education: Applying Self-Determination Theory to Understand the BME Attainment Gap." *Studies in Higher Education* 46 (3): 534–547. doi:10.1080/03075079.2019.1643305.
- Cameron, J. E. 2004. "A Three-Factor Model of Social Identity." *Self and Identity* 3 (3): 239–262. doi:10.1080/13576500444000047.
- Carless, D. 2006. "Differing Perceptions in the Feedback Process." *Studies in Higher Education* 31 (2): 219–233. doi:10.1080/03075070600572132.
- Carless, D. 2022. "From Teacher Transmission of Information to Student Feedback Literacy: Activating the Learner Role in Feedback Processes." *Active Learning in Higher Education* 23 (2): 143–153. doi:10.1177/1469787420945845.
- Deeley, S. J., M. Fischbacher-Smith, Dr Karadzhev, and E. Koristashevskaya. 2019. "Exploring the "Wicked" Problem of Student Dissatisfaction with Assessment and Feedback in Higher Education." *Higher Education Pedagogies* 4 (1): 385–405. doi:10.1080/23752696.2019.1644659.
- Handley, K., M. Price, and J. Millar. 2011. "Beyond "Doing Time": Investigating the Concept of Student Engagement with Feedback." *Oxford Review of Education* 37 (4): 543–560. doi:10.1080/03054985.2011.604951.
- Haslam, S. A. 2017. "The Social Identity Approach to Education and Learning: Identification, Ideation, Interaction, Influence and Ideology." In *Self and Social Identity in Educational Contexts*, edited by K. I. Mavor, M. J. Platow, and B. Bizumic, 19–51. Oxford: Routledge/Taylor and Francis Group.
- Hattie, J., and H. Timperley. 2007. "The Power of Feedback." *Review of Educational Research* 77 (1): 81–112. doi:10.3102/003465430298487.
- Haughney, K., S. Wakeman, and L. Hart. 2020. "Quality of Feedback in Higher Education: A Review of Literature." *Education Sciences* 10 (3): 60. doi:10.3390/educsci10030060.
- Hayes, A. F. 2009. "Beyond Baron and Kenny: Statistical Mediation Analysis in the New Millennium." *Communication Monographs* 76 (4): 408–420. doi:10.1080/03637750903310360.
- Higgins, R., P. Hartley, and A. Skelton. 2001. "Getting the Message Across: The Problem of Communicating Assessment Feedback." *Teaching in Higher Education* 6 (2): 269–274. doi:10.1080/13562510120045230.
- Jones, S. E., L. Taylor, and K. Johnson. 2024. "Widening Participation Status and Consumer Identity Impact the Relation between University Student Social Identity and Grades in a Non-Fee-Paying Context." [Manuscript Submitted for Publication].
- Jonsson, A. 2013. "Facilitating Productive Use of Feedback in Higher Education." *Active Learning in Higher Education* 14 (1): 63–76. doi:10.1177/1469787412467125.
- Jönsson, A., L. Yang, A. M. Forsythe, N. E. Winstone, G. Mathlin, and R. A. Nash. 2019. "Building Feedback Literacy: Students' Perceptions of the Developing Engagement with Feedback Toolkit." *Frontiers in Education* 4: 39. doi:10.3389/feduc.2019.00039.

- Lipnevich, A. A., and J. K. Smith. 2009. "I Really Need Feedback to Learn:" Students' Perspectives on the Effectiveness of the Differential Feedback Messages." *Educational Assessment, Evaluation and Accountability* 21 (4): 347–367. doi:10.1007/s11092-009-9082-2.
- Lund Dean, K., and J. P. Jolly. 2012. "Student Identity, Disengagement, and Learning." *Academy of Management Learning & Education* 11 (2): 228–243. doi:10.5465/amle.2009.0081.
- Martin, L., G. Spolander, I. Ali, and B. Maas. 2014. "The Evolution of Student Identity: A Case of Caveat Emptor." *Journal of Further and Higher Education* 38 (2): 200–210. doi:10.1080/0309877X.2012.722200.
- Nash, R. A., and N. E. Winstone. 2017. "Responsibility-Sharing in the Giving and Receiving of Assessment Feedback." *Frontiers in Psychology* 8: 1519. doi:10.3389/fpsyg.2017.01519.
- O'Donovan, B., M. Price, and C. Rust. 2008. "Developing Student Understanding of Assessment Standards: A Nested Hierarchy of Approaches." *Teaching in Higher Education* 13 (2): 205–217. doi:10.1080/13562510801923344.
- Pintrich, P. R., D. A. F. Smith, T. Garcia, and W. J. McKeachie. 1993. "Reliability and Predictive Validity of the Motivated Strategies for Learning Questionnaire (MSLQ)." *Educational and Psychological Measurement* 53 (3): 801–813. doi:10.1177/0013164493053003024.
- Pitt, E., and N. E. Winstone. 2018. "The Impact of Anonymous Marking on Students' Perceptions of Fairness, Feedback and Relationships with Lecturers." *Assessment & Evaluation in Higher Education* 43 (7): 1183–1193. doi:10.1080/02602938.2018.1437594.
- Platow, M. J., K. I. Mavor, and D. M. Grace. 2013. "On the Role of Discipline-Related Self-Concept in Deep and Surface Approaches to Learning among University Students." *Instructional Science* 41 (2): 271–285. doi:10.1007/s11251-012-9227-4.
- Preacher, K. J., and A. F. Hayes. 2008. "Asymptotic and Resampling Strategies for Assessing and Comparing Indirect Effects in Multiple Mediator Models." *Behavior Research Methods* 40 (3): 879–891. doi:10.3758/BRM.40.3.879.
- Rathbone, J. A., T. Cruwys, M. Stevens, L. J. Ferris, and K. J. Reynolds. 2023. "The Reciprocal Relationship between Social Identity and Adherence to Group Norms." *The British Journal of Social Psychology* 62 (3): 1346–1362. doi:10.1111/BJSO.12635.
- Rowe, A. D., and L. N. Wood. 2008. "Student Perceptions and Preferences for Feedback." *Asian Social Science* 4 (3): 78–88.
- Saunders, D. B. 2015. "They Do Not Buy It: Exploring the Extent to Which Entering First-Year Students View Themselves as Customers." *Journal of Marketing for Higher Education* 25 (1): 5–28. doi:10.1080/08841241.2014.969798.
- Scott, J., J. Badge, and A. Cann. 2009. "Perceptions of Feedback One Year On: A Comparative Study of the Views of First- and Second-Year Biological Sciences Students." *Bioscience Education* 13 (1): 1–9. doi:10.3108/beej.13.2.
- Smyth, L., K. I. Mavor, M. J. Platow, D. M. Grace, and K. J. Reynolds. 2015. "Discipline Social Identification, Study Norms and Learning Approach in University Students." *Educational Psychology* 35 (1): 53–72. doi:10.1080/01443410.2013.822962.
- Taylor-Bunce, L., M. Bennett, and S. E. Jones. 2022. "The Relation Between Discipline Identity and Academic Achievement Within a Marketized Higher Education Context: A Serial Mediation Model of Approaches to Learning and Course Complaints." *Frontiers in Psychology* 13: 749436. doi:10.3389/fpsyg.2022.749436.
- Van der Kleij, F. M., and A. A. Lipnevich. 2021. "Student Perceptions of Assessment Feedback: A Critical Scoping Review and Call for Research." *Educational Assessment, Evaluation and Accountability* 33 (2): 345–373. doi:10.1007/s11092-020-09331-x.
- Winstone, N. E., R. A. Nash, M. Parker, and J. Rowntree. 2017. "Supporting Learners' Agentic Engagement With Feedback: A Systematic Review and a Taxonomy of Recipience Processes." *Educational Psychologist* 52 (1): 17–37. doi:10.1080/00461520.2016.1207538.
- Wisniewski, B., K. Zierer, and J. Hattie. 2019. "The Power of Feedback Revisited: A Meta-Analysis of Educational Feedback Research." *Frontiers in Psychology* 10: 3087. doi:10.3389/fpsyg.2019.03087.
- Yu, S., Y. Zheng, L. Jiang, C. Liu, and Y. Xu. 2021. "I Even Feel Annoyed and Angry: Teacher Emotional Experiences in Giving Feedback on Student Writing." *Assessing Writing* 48: 100528. doi:10.1016/j.asw.2021.100528.