Student beliefs and attitudes about authorial identity in academic writing

Gail Pittam,[a*] James Elander,[b] Joanne Lusher,[c] Pauline Fox[d] & Nicola Payne[e]

a. Faculty of Health & Social Care, Anglia Ruskin University, UK
b. Centre for Psychological Research, University of Derby, UK
c. Department of Psychology, London Metropolitan University, UK
d. Department of Psychology, Thames Valley University, London, UK
e. Department of Psychology, Middlesex University, London, UK

Correspondence: J.Elander@derby.ac.uk

Abstract

Authorial identity is the sense a writer has of themselves as an author and the textual identity they construct in their writing. This paper describes two studies exploring psychology students' authorial identity in academic writing. A qualitative focus group study with 19 students showed that authorial identity was largely unfamiliar to students, and highlighted the obstacles perceived by students to constructing authorial identities in university assignments. A questionnaire survey of 318 students explored the factor structure of an 18-item Student Authorship Questionnaire (SAQ). Three factors described aspects of student authorial identity ('confidence in writing', 'understanding authorship' and 'knowledge to avoid plagiarism'), and three factors described approaches to writing ('top-down', 'bottom-up' and 'pragmatic'). Confidence in writing and knowledge to avoid plagiarism were significantly higher among year two than year one students. Both studies could inform interventions to reduce unintentional plagiarism by improving students' authorial identity.

Keywords: Authorship, authorial identity, unintentional plagiarism, literacy, writing.

Introduction

Incidences of plagiarism and other forms of academic dishonesty have increased significantly (Diekhoff et al., 1996). In one UK study, 46% of students reported copying an entire paragraph into their work without acknowledgement and 23% reported doing so more than once or twice (Bennett, 2005). A student interview study showed that plagiarism was viewed as a less serious form of cheating and was more likely to be seen as a matter of academic etiquette than intellectual theft. There was also considerable fear of accidental plagiarism, and much confusion about what practices constituted plagiarism, including whether students could claim an idea as their own when the inspiration for it came from another author, and whether practices such as copying or paraphrasing paragraphs of text counted as plagiarism if the source was referenced (Ashworth et al., 1997).

Institutional responses to plagiarism have tended to focus on systematic detection methods using software like Turnitin (Warn, 2006), and honour codes to promote ethical values and standards among students (McCabe & Treviño, 1993; 2002). However, there is increasing recognition that

plagiarism is often unintentional, occurring, for example, 'when a student fails to adopt (perhaps because they do not know) proper protocols for referring to academic material, including appropriate ways of quoting, acknowledging ideas and compiling reference lists' (Park, 2003, p. 476). Valentine (2006) suggested that treating plagiarism as a matter of honesty, and judging it solely by reference to the submitted text, has impeded efforts to improve students' academic writing skills.

Authorial identity is the sense a writer has of themselves as an author and the textual identity they construct in their writing. In an analysis that linked the fields of academic literacy and textual identity construction, and with interview data from five graduate English as second language (ESL) students, Abasi et al. (2006) argued that textual plagiarism should be considered as 'an issue of authorial identity in terms of students' perceptions of who they are as writers', and could occur because of 'students' failure to represent themselves as writers who should make a novel contribution, however modest it might be, through critically engaging with sources' (p. 114). This view means treating plagiarism as an issue for learning and development rather than as moral transgression, and Abasi et al. (2006) argued that writing instruction could raise student awareness of self-representation in writing and of the epistemology associated with academic authorship.

Instructional interventions that consider students as writers and aim to promote authorial identity should therefore be informed by evidence about student beliefs and attitudes about authorship and authorial identity, as well as those associated with problematic approaches to writing. However, apart from Abasi et al's (2006) work with ESL students, research on student authorial identity has consisted mainly of analyses of cultural and institutional representations of authorship (Howard, 1995), socio-cultural analyses of discourses of writing (Cherry, 1988; Ivanic, 1995; 1998), textual analysis of student writing (Henry, 1994), or analyses of the impact of the text on the reader (Hatch et al., 1993), rather than direct evidence about student beliefs and attitudes.

Our first aim was therefore to explore student beliefs and attitudes about authorial identity, using focus groups, in order to inform potential interventions to prevent plagiarism by promoting greater student authorial identity in academic writing.

We also wished to develop a brief questionnaire measure of student beliefs and attitudes to authorship and academic writing. Brief measures are desirable because they can be completed between or within timetabled teaching, making more inclusive student samples possible, and because they increase the number of measures that can be included in a study, allowing multiple factors to be examined together.

Questionnaires used in previous research on plagiarism have measured perceptions of cheating (Roberts & Toombs, 1993), actual cheating and plagiarism (Caruana et al., 2000), and potential predictors of plagiarism such as academic integration, academic goal orientation, and attitudes to plagiarism (Bennett, 2005). Questionnaire measures also exist of compositional styles and strategies. One such questionnaire measures strategies called 'elaborationist', 'low self-efficacy', 'reflective-revisionist', 'spontaneous-impulsive' and 'procedural' (Lavelle, 1993). Another measures strategies called 'minimal-drafting', outline-and-develop', 'detailed-planning', and 'think-then-do' (Torrance et al., 2000). However both of those are measures of strategies used in writing and composition itself rather than beliefs and attitudes to authorship and writing.

A brief measure of beliefs and attitudes associated with authorship and academic writing, with a specific focus on writing in one's own words and using material from other sources, would therefore be useful in further research on the causes of plagiarism and the development of academic literacy, as well as the evaluation of interventions to prevent plagiarism by promoting academic literacy and/or authorial identity.

Our second aim was therefore to develop a questionnaire measuring beliefs and attitudes to authorship and writing that comprised 15-20 items and could be completed within about 10 minutes. The objectives were to explore the factor structure of the relevant beliefs and attitudes, and examine differences between students at different levels of study.

Both the focus group and questionnaire study were part of a project that took place in three post-1992 universities in London, UK, to promote greater student understanding of authorship (the Student Authorship Project: www.writenow.ac.uk). Ethical approval was obtained from the Research Ethics Committee at University One and the study was also considered and approved by the Psychology Department Ethics Committee at University Three at their request.

Study 1: focus groups
Methods

A total of 19 psychology students volunteered to take part in focus groups after attending timetabled teaching sessions that introduced the concept of authorship and discussed the risks of unintentional plagiarism arising from mistakes with citation, quotation and referencing. There were five first and second year undergraduates at University One, six second and third year undergraduates at University Two, and two third year undergraduates and six postgraduate (MSc) students at University Three. The focus groups were facilitated by the first author and the same topic guide was used for each group. Students were asked about their understanding of the concepts of authorship and plagiarism, the presentation of these concepts during the timetabled sessions, and how they viewed themselves and their roles in writing university assignments.

The group discussions were audio-recorded and transcribed, and the transcripts were analysed using a six-phase thematic analysis: familiarisation with the data, generating initial codes, searching for potential themes, reviewing these themes, defining and specifying each theme, and writing up a report (Braun & Clarke, 2006). NVivo, a computer-based, data-handling software package (QSR International Pty Ltd, 2001), was used to aid the organisation and retrieval of data and codes.

Results

Four themes were identified: 'students as authors', 'author or editor', 'paraphrase, quotation and plagiarism' and 'obstacles to authorship'. These themes are discussed with selected quotes to illustrate typical beliefs and attitudes. Many of the issues discussed elicited similar comments and concerns from both undergraduate and postgraduate students. When a comment relates to the views or experiences of a more limited subsection of the participants, this is indicated.

Students as authors
This theme dealt with students' perceptions of themselves as authors. Only two of the 19 students reported having thought about the concept of authorship before, and in both instances this related to activities outside university, through experiences in copyrighting music (Third year undergraduate 11) or taking part in a writing group (Second year undergraduate 10). Other students had not thought about the concept of authorship, and did not think of themselves as authors:

> 'It seems a bit grand to describe yourself as an author ... it's just not a word that I would associate with myself so much unless I wrote a book. I just thought of myself as a student writing an essay' (First year undergraduate 5)

'You think of an author as a professional person who writes a book, not us' (Postgraduate student 5)

'We're just picking out what everyone else has done and trying to put it in some kind of order' (Postgraduate student 2)

However, others could see potential links between student writing and authorship:

'If you're a writer … you're adding something or you're bringing something new, and I think the problem for us [as students] is that we don't feel we are most of the time, because we're all writing the same essay and we're reading from books people have written about before, and it doesn't really feel like you're producing something that's, it's not going to change the world. But it's still new because you're forming an argument for a certain question, even if someone else has done it before yours, it's always going to be different from someone else' (Second year undergraduate 8)

Some students described feeling more like an author when they felt a greater sense of affinity or ownership for the work, for example if they were particularly interested in the subject, or for empirical research project work involving primary data collection:

'Now I'm starting to think that we are authors … it might be since we've started doing projects as well, because it feels like it is your own work, even like in the first year when you're collecting data together, but now I feel more like an author and it's quite nice. But before I wouldn't have classed myself [as an author] at all' (Second year undergraduate 8)

Author or editor?
This theme dealt with the difficulties and conflicts perceived by students in relation to adopting authorial roles in the writing of university assignments. One student suggested that the requirement to reference everything in academic writing makes one feel that the ideas are not one's own, and some saw the process of producing a written assignment as more akin to editing than authoring:

'I understand that we need backup from some scientific research … but still I can't help thinking that I am editing everything, not putting my idea or opinion … or something new' (Second year undergraduate 9)

The same student felt that she tends to get better marks if she acts as an editor:

'The thing is, especially the coursework at university, if we create something, really create something which is a really good thing, we tend to get less marks than editing something from others' work. So it's confusing to me, what do markers, lecturers, want us to do, be an author or be an editor?' (Second year undergraduate 9)

One student tried to express the conflicting pressures on students to produce work that is based on evidence from appropriate sources and also contains original elements:

'I think my problem was, and I could see problems with other people, other people just wanted to be very self-opinionated, and I don't know whether this is to do with authorship, but to try and get the opinions and facts sorted out rather than, well I've got loads of ideas, and suddenly it's not even science based. So that area needs to be sorted out. And then there's someone like me who gets very systematic and everything's got to be backed up and suddenly I haven't got a brain any more, any ideas. Just to sort that out, how much you can actually bring' (Third year undergraduate 11)

Students also perceived conflicts in what they believed lecturers wanted and expected from them in written assignments:

> 'As I understand it they want us to show that we know what we're talking about, at the same time they just want us to show that we've read so many books or a particular article or question. So you're going to mention the authors and you're going to quote something, but still they asked us not to do that as much as we can so it's still [confusing]' (Second year undergraduate 10)

Paraphrase, quotation and plagiarism

Students from all three universities had had sessions on or discussion about plagiarism in the past and most were fairly confident about their understanding of plagiarism. With further discussion, however, a number of areas of uncertainty emerged, and this theme relates to the confusion that both undergraduate and postgraduate students expressed about the boundaries between quotation, paraphrasing and plagiarism:

> 'Well plagiarism is just basically re-writing and not referencing … but if you think in the same way maybe you just rephrased it, I don't think that's plagiarism … It's just like when you paraphrase three pages, well it is in some kind of way, but if you paraphrase your own thoughts based on your own reading, well …' (Second year undergraduate 10)

For one student this related to the specific issue of how many words you can use before you have to quote:

> 'If you use two words would that be plagiarism or five words? … I want to know about borderline cases … I mean when you're paraphrasing something you will use three words here and three words there ... but you reference that, but still you have the issue of quotation marks, when should you start using quotation marks; if it's just two words you don't, but four?' (Postgraduate student 5)

Many students also expressed uncertainty about expressing ideas or concepts they had read about in their own words:

> 'I felt when I read something that's the only way I could understand it but I wouldn't be able to write it in my own words. I used to change a few words around maybe, if I felt like I couldn't re-write it at all or put it into my own words I used to just put quotation marks with it. But then I used to get confused because I didn't know if that was plagiarism' (Second year undergraduate 6)

> 'Whatever argument you come up with in an essay it will probably have been said [by] someone before, and obviously you read lots of books and they're arguing lots of different points of view, so at what point do you start referencing those because all of your ideas are coming from different sources, but they're kind of an amalgamation of different sources' (Postgraduate student 5)

Sometimes students felt that they could hardly improve on the way something had been expressed in the source material:

> 'What I find hard and it's a certain word and it's defined in a certain way and I think how am I going to write that in my essay better than it's done there, and I don't want to change it in case I change what it means, especially when you don't understand it properly' (Second year undergraduate 8)

> 'I paraphrase a lot because sometimes I feel what they write in the books is the best way to express it anyway so I just tweak it a bit' (Third year undergraduate 13)

One student described using too many quotations in an attempt to avoid this problem:

> 'I've always been told from the supervisor or marker that I shouldn't use so much quotations, but I try not to plagiarise and I paraphrase a sentence as much as I can, but sometimes I can't and I totally agree with the author's point of view but I can't paraphrase so I just use quotation to avoid plagiarism' (Second year undergraduate 9)

An American student described how the approach to academic authorship adopted in US schools prepared students much better to avoid plagiarism:

> 'It's different for me because I remember, maybe starting in fourth grade they would teach us, we would learn bibliographies, and ever since then, because they like walk you through everything at home and writing papers all the way through high school and college, there's always a day where you all bring in your reference stuff and we're going to source everything together just to make sure that there's no plagiarism, they kind of hold your hand through it' (Second year undergraduate 7)

Obstacles to authorship
This theme dealt with students' perceptions of factors that militate against authorial identity. A commonly raised issue was the limited time that students have to learn and think about a topic and prepare assignments:

> 'Our essay is usually a very large, wide topic. It's not possible in one or two weeks you can read through all those related journals or books related to the topics, and it's not possible in that time that you can digest all those, even if you read through you might not understand, you might not remember. So it's very difficult to, say, put everything away and use your own words to write everything down' (Second year undergraduate 2)

Another issue raised was the particular difficulties experienced by students for whom English is not a first language. Some of these difficulties related to the difficulty of writing in another language:

> 'As an author I should use our own words to express what we're thinking, but sometimes it's just so impossible. Especially for students from abroad, we're not using English as a first language so it's so difficult for us' (Second year undergraduate 9)

Some of the difficulties were also due to cultural factors:

> 'I'm from an Asian country and many books and research reports are from those born in Western society, so totally different. Sometimes I have a totally different point of view ... but I can't express it because I haven't got any background, scientific background or proof or whatever, evidence, so it's so frustrating sometimes for me too. Because I just don't think something like those people' (Second year undergraduate 9)

Discussion

None of the students identified spontaneously with the role of author in an academic context, and almost all the students saw authorship as applying mainly to professional writers outside academia.

Authorial identity was especially weak for essay assignments, which were not perceived as unique pieces of work (one student suggested 'we're all writing the same essay'). However, there was more sense of ownership and authorial identity for project work, where students may have chosen a topic of particular interest, and which in psychology often involve primary empirical data collection and analysis, so that each student's project is different. One implication is that authorial identity could be promoted by greater use of individualised assignments.

Students also experienced tension between what they perceived is required for genuine authorship (original thinking that departs from what has gone before) and the style of writing required in academic assignments (writing that stays much closer to carefully referenced existing material), which the students perceived as being more like editing than authoring. Difficulties with finding the right balance between demonstrating wide reading, giving one's own views, and using the existing literature to back up the points one is making were given by students as examples of the tension between writing as authors or editors. For some students this tension was not helped by what they saw as mixed or conflicting messages from tutors, and one student reported finding that less original, more derivative work tended to attract higher marks.

This tension between developing and presenting original ideas and working closely with existing sources came most clearly into focus in relation to written argument, which students saw as presentation of their own ideas and rather separate from analysis of the work of others. A previous qualitative study showed that students saw argument as expressing their own view, whereas university tutors saw it as developing a point of view in relation to evidence (Harrington et al, 2006). In another study where students were interviewed about essay writing, the importance of presenting one's own views and opinions was the most frequently mentioned factor (Read et al., 2001), and in another, students were more likely than lecturers to emphasise the need for original thought, but students who believed in presenting their own opinions in essays obtained lower grades than those who did not (Branthwaite et al., 1980).

The confusion expressed by students about the exact boundaries between paraphrasing, quotation and plagiarism, and about referencing the ideas as opposed to the words of others, and the fear of accidental plagiarism that this confusion gives rise to, have been observed previously (Ashworth et al., 1997), but the present data showed that those fears and uncertainties reflected under-developed authorial identities that seemed to be associated with surface approaches to learning. An insight into the approach to learning associated with using the words of others is provided within the 'paraphrase, quotation and plagiarism' theme by the student who commented 'I don't want to change it in case I change what it means, *especially when you don't understand it properly*' (our italics).

The findings relating to the experiences of students writing in English as a second language are consistent with previous studies that have demonstrated that, for reasons of both linguistic competency and culture, those students are especially prone to what has been called 'patchwriting', which makes them vulnerable to unintentional plagiarism (Abasi et al., 2006; Howard, 1995; Pecorari, 2003). The present data suggest that the experiences reported by students writing in English as a second language are in many ways just more extreme versions of the obstacles perceived by students more generally who fail to adopt authorial identities in their writing.

Study 2: questionnaire survey
Methods
The questionnaire survey sample comprised 364 psychology students attending timetabled classes for undergraduate and postgraduate programmes at the same three universities. Questionnaires

were distributed at the beginning of the session and almost all students present returned completed questionnaires, resulting in a participation rate in excess of 90%. Given the sensitivity of the subject of plagiarism, the survey was anonymous and age and gender were not recorded, to avoid collecting any information that could potentially be used to identify individual students. The data analysis was restricted to the 318 (87%) cases with complete data for every questionnaire item. There were 72 students (23%) at University One, 197 (62%) at University Two, and 49 (15%) at University Three. There were 135 (42.5%) first year undergraduates, 77 (24.2%) second year undergraduates, 82 (25.8%) third year undergraduates, and 24 (7.5%) postgraduate (MSc) students.

The constructs represented in the questionnaire were identified by a review of the literature on student authorship and plagiarism. These included:

- Enjoyment/satisfaction/confidence/self-efficacy in writing in one's own words (Lavelle, 1993).
- Difficulties/problems perceived by students in expressing academic concepts in their own words (Ashworth et al., 1997; Richardson, 2004).
- Knowledge about the roles and responsibilities of authors (Howard, 1995; Ivanic, 1998).
- Confidence in avoiding plagiarism (Landau et al, 2002; Schuetze, 2004).
- Knowledge about referencing and citation (Ashworth et al., 1997; Schuetze, 2004; Valentine 2006).
- Patchwriting: the practice of basing one's writing very closely on existing text   (Abasi et al., 2006; Howard, 1995; Pecorari, 2003)
- Time pressure as an obstacle to authorial identity and risk factor for plagiarism (Dordoy, 2002; Franklyn-Stokes & Newstead, 1995).
- Goal orientation or expectation of higher grades as an obstacle to authorial identity and risk factor for plagiarism (Bennett, 2005; Dordoy, 2002; Franklyn-Stokes & Newstead, 1995).
- The importance of argument and expression of one's own ideas (Abasi et al., 2006; Bonnet, 2001; Read et al., 2001; Wells, 1993).

A pool of potential items was generated and these were narrowed down to a target number of 15-20 through pilot work, with the aim of identifying representative and meaningful items tapping attitudes and beliefs about writing in one's own words and using material taken directly from other sources. This involved consultation and discussion with academic tutors and students, which took place separately from the focus group study. Consistent with the process followed by Bennett (2005) to select items for questionnaire measures of plagiarism using established frameworks, the criteria used to select and adapt items were that the questionnaire items should: 1) fall within the scope of the relevant constructs, 2) be consistent with the relevant literature, 3) express the construct in an effective way, 4) be worded at an appropriate level of abstraction, 5) be clear in meaning, and 6) be compatible with the vocabulary of the target respondents.

The questionnaire comprised 17 statements with five-point Likert-type response scales ranging from 'strongly agree' to 'strongly disagree', and one item that asked participants to indicate the proportion of their assignments they would expect to consist of quotations or material taken directly from other sources (appendix 1). Because the questionnaire was being used with psychology students, the word 'psychology' was used in several items, but could be replaced with the words 'my subject', 'my discipline' or the name of another discipline.

Results

The data analysis was conducted using SPSS (SPSS for Windows 14, 2005, SPSS Inc., Chicago). We first conducted an exploratory factor analysis with oblique (Oblimin) rotation of the 18 questionnaire items. This revealed six factors with Eigen values above 1.0, which together accounted for 55% of

the total variance. Table 1 shows the rotated factor loadings. Each factor was interpreted in terms of the items with higher loadings for that factor than any other.

The first factor, labelled 'confidence in writing', accounted for 18.5% of the variance and was made up of five items about expressing concepts in one's own words, enjoying doing so, not finding it difficult, and being confident and not afraid about one's writing.

The second factor, labelled 'pragmatic approach to writing', accounted for 10% of the variance and was made up of four items about believing one obtains higher marks for using more material from other sources rather than writing in one's own words, not having time to put everything in one's own words, and having higher proportions of material from other sources in assignments.

The third factor, labelled 'understanding authorship', accounted for 8% of the variance and was made up of two items about knowing what it means to be the author of written work and knowing about the responsibilities of an author.

The fourth factor, labelled 'top-down approach to writing', accounted for 6.9% of the variance and was made up of two items about thinking about what one wishes to say in an assignment before looking for evidence on the subject and believing in making an argument based on one's own thoughts.

Table 1. Rotated factor loadings

Item	Factor					
	1	2	3	4	5	6
I am afraid that what I write myself about psychology will look unimpressive*	-.72					
I am confident that when I write something about psychology it will look impressive	.68					
I find it difficult to express psychology concepts in my own words	-.65					
I know what it means to express a concept or idea in my own words	.60				.43	
I enjoy writing in my own words	.54				.45	
I get higher marks by writing more of my assignment in my own words		-.73				
I get better marks when I use more material from books, journals or the Internet*		.60				.43
I just don't have time to put everything in my own words when writing an assignment		.51				
What proportion would consist of material from a book, journal of the Internet*		.48				
I know what it means to be the author of a piece of written work			.81			
I know what the responsibilities of an author are			.75			
I begin by thinking about what I want to say, and then look for evidence*				.72		
Writing is all about making an argument based on my thoughts about the subject*		-.41		.44		
I would never be accused of plagiarism					.74	
I know how to show which parts of my assignments were not written by me					.71	
I know how to provide references for citations and quotations in my written work					.70	
I begin by looking for material I can include and then think about how I can put it together*						.77
Writing is all about finding material and arranging it in the form of an essay*						.56

Notes to table 1:
Loadings below .40 are not shown.
Each factor was interpreted in terms of items with higher loadings for that factor than any other (loadings shown in bold).

*item truncated or paraphrased

The fifth factor, labelled 'knowledge to avoid plagiarism', accounted for 6% of the variance and was made up of three items about being confident about not being accused of plagiarism, knowing how to show which parts of an assignment were not written by the author, and knowing how to provide references.

The sixth factor, labelled 'bottom-up approach to writing', accounted for 5.9% of the variance and was made up of two items about believing that writing is about finding material and arranging it, and looking for relevant material before thinking about how it could be put together.

Three of the factors reflect aspects of authorial identity (confidence in writing, understanding authorship and knowledge to avoid plagiarism), and three reflect approaches to writing (pragmatic, top-down, and bottom-up). Scores were computed for six scales by summing across the highest loading items for each factor and dividing by the number of items in each case, using the scoring method given in appendix 2. Three items with negative factor loadings were reverse-scored, so that higher scores for each scale represent greater propensity towards the attitude or approach described by the scale. For confidence in writing, understanding authorship, knowledge to avoid plagiarism and top-down approach to writing, higher scores indicate more authorial responses. For pragmatic and bottom-up approaches to writing, higher scores indicate less authorial responses.

Table 2. Pearson correlations among scale scores

	1	2	3	4	5
1 Confidence in writing					
2 Understanding authorship	.23**				
3 Knowledge to avoid plagiarism	.39**	.32**			
4 Top-down approach to writing	.16*	.11*	.17*		
5 Bottom-up approach to writing	-.11	.02	.03	-.07	
6 Pragmatic approach to writing	-.18*	-.08	-.10	-.13*	.25**

* p ≤ .05; ** p ≤ .001

Cronbach's Alpha was calculated for scales with more than two items. These were 0.69 for confidence in writing, 0.62 for knowledge to avoid plagiarism, and 0.46 for pragmatic approach to writing, indicating that internal reliability was acceptably high for confidence in writing and knowledge to avoid plagiarism, but only modest for pragmatic approach to writing. Correlations among the scales are given in table 2. These show that confidence, understanding, knowledge and top-down were all positively inter-correlated, and that pragmatic was correlated negatively with top-down and positively with bottom-up.

Cronbach's Alpha was calculated for scales with more than two items. These were 0.69 for confidence in writing, 0.62 for knowledge to avoid plagiarism, and 0.46 for pragmatic approach to writing, indicating that internal reliability was acceptably high for confidence in writing and knowledge to avoid plagiarism, but only modest for pragmatic approach to writing. Correlations among the scales are given in table 2. These show that confidence, understanding, knowledge and top-down were all positively inter-correlated, and that pragmatic was correlated negatively with top-down and positively with bottom-up.

Table 3. Mean (SD) questionnaire scores

	1st year	2nd year	3rd year	MSc	Total
Confidence in writing	3.16 (.60)	3.47 (.57)	3.14 (.59)	3.51 (.51)	3.26 (.60)
Understanding authorship	3.42 (.87)	3.73 (.67)	3.84 (.81)	4.08 (.67)	3.65 (.82)
Knowledge to avoid plagiarism	3.49 (.73)	3.90 (.71)	3.87 (.68)	4.24 (.50)	3.74 (.73)
Top-down approach to writing	3.01 (.73)	3.22 (.79)	3.16 (.87)	3.33 (.89)	3.12 (.80)
Bottom-up approach to writing	3.32 (.72)	3.32 (.76)	3.32 (.80)	3.29 (.87)	3.32 (.76)
Pragmatic approach to writing	2.63 (.55)	2.67 (.63)	2.70 (.63)	2.50 (.64)	2.65 (.60)

Mean scale scores for students in the present sample are given in table 3. Differences between years of study and universities were tested in a 4 (year of study) x 3 (university) multivariate analysis of variance. The multivariate tests showed a marginally significant effect of year of study (Wilks' Lambda = .91, F = 1.61, p = .051; Roy's Largest Root = .057, F = 2.87, p = .01), but no significant effect of university (Wilks' Lambda = .95, F = 1.33, p = .20) or year of study x university interaction (Wilks' Lambda = .88, F = 1.26, p = .16). We therefore examined univariate effects only for year of study. These showed significant effects for confidence in writing (F = 2.82, p = .039) and knowledge to avoid plagiarism (F = 4.82, p = .003). Mean scores for each year of study are plotted in figure 1. Post hoc Sheffé tests showed that for confidence in writing, year 2 differed significantly from year 1, and year 3 differed significantly from year 2, and for knowledge to avoid plagiarism, year 1 differed significantly from years 2 and 3 and Masters.

Fig 1. Confidence in writing and knowledge to avoid plagiarism: mean scores for students in different years of study
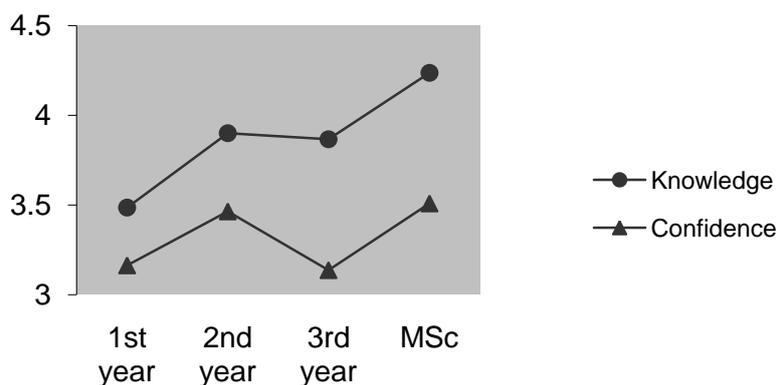
Discussion

The data analysis revealed six scales that are meaningful in the context of previous research and the focus group findings. Three of the scales represent key attributes of authorship and authorial identity – confidence, understanding and knowledge – that mirror to a large extent the themes that

emerged from the qualitative data analysis. Confidence in writing reflects the varied views expressed by students about their identification with the role of author. Understanding authorship reflects students' varied views about the roles and responsibilities of authors. Knowledge to avoid plagiarism reflects students' uncertainty about paraphrasing and referencing.

The other three scales represent broad strategies or approaches to writing – top-down, bottom-up and pragmatic – that have implications for authorship and plagiarism, and are conceptually very different from previous measures of composition strategies (Lavelle, 1993; Torrance et al., 2000). These scales may be useful for exploring links between approaches to learning and approaches to writing, for there are intuitive parallels with deep, surface and strategic approaches to learning (Entwistle et al., 2000). The top-down scale describes an approach of starting with higher-level arguments and concepts before looking for the relevant evidence, which may be related to a deep approach to learning. The bottom-up scale describes an approach of looking for material that can be assembled to produce an essay, which may be related to a surface approach to learning. The pragmatic scale describes an approach based on using more secondary material in order to achieve higher marks or save time, which may be related to a strategic approach to learning.

Internal reliability was acceptable for confidence in writing and knowledge to avoid plagiarism, the two scales for which there were significant year of study effects, but only moderate for pragmatic approach to writing. This is an exploratory analysis and further research could provide more evidence about the psychometric properties of the scales, including confirmation of the factor structure, assessment of test-retest reliability, and assessments of validity. In future research it may also be useful to focus on expanded versions of specific scales, so that different aspects of understanding of authorship, for example, could be investigated with more items, perhaps including those that tap understanding directly, rather than depending on students' perceptions of their own understandings.

In relation to validity, it would be useful to know about associations between these scales and a number of other measures. For example: risk factors for plagiarism, such as academic integration and goal orientation (Bennett, 2005); self-report measures of plagiarism (Caruana et al., 2000); and objective measures of paraphrasing (Landau et al., 2002; Keck, 2006; Roig, 1997, 1999), citation (Schuetze, 2004) and plagiarism (Barry, 2006; Homewood, 2007; Landau et al., 2002).

The year of study effects were significant for confidence in writing and knowledge to avoid plagiarism. For knowledge to avoid plagiarism, the significant differences were between year 1 and subsequent years, and increases in knowledge from year 2 onwards were not significant. This is consistent with the focus group evidence within the theme 'paraphrase, quotation and plagiarism', which showed that students in years 2, 3 and Masters level continued to be confused about referencing and citation.

For confidence in writing, there was a significant increase from year 1 to year 2, but a significant fall from year 2 to year 3, the explanation for which is not immediately obvious. Perhaps year 3 assignments are perceived by students as more challenging, with greater emphasis on individual student research, more need for evidence, more complex source material (research papers rather than textbooks), and greater expectations of originality. Students may also experience more anxiety about grade achievement later in their degree programmes. Taken together, the year of study effects highlight the complexity of student attitudes to writing and authorial identity, which do not appear to follow a simple linear progression of increasing confidence and expertise, and further research will be needed to understand more fully their development.

For understanding authorship and the three approaches to writing scales, the year of study effects were not significant. Understanding of authorship may be relatively under-developed among students at all levels, as the focus group data suggested, and approaches to writing may reflect more enduring styles or dispositions that would not be expected to change spontaneously over time. Torrance et al. (2000) found that 'minimal-drafting', outline-and-develop', 'detailed-planning', and 'think-then-do' writing strategies were consistent over time, with no evidence of systematic changes in strategy from year to year. However, that does not mean that specific interventions could not aim to increase understanding of authorship and top-down approaches to writing, and reduce bottom-up and pragmatic approaches to writing.

General discussion

The qualitative and quantitative findings were convergent in a number of areas, including the relative absence of significant changes in authorial attitudes and identity across years of study. Both sets of findings can inform the development of interventions to improve academic literacy and reduce unintentional plagiarism, and both provide starting points for further investigation.

The focus groups showed that there is considerable scope for increasing students' authorial identity, and that this is a potentially powerful focus for interventions to improve academic writing and reduce plagiarism. So what form might interventions with those aims take? The present studies suggest that useful exercises or activities would be to encourage students to see themselves as authors, and help them understand the roles and responsibilities of an author. Exercises with a specific focus on academic argument may also be useful, to clarify that authorship in academic writing involves more than just presentation of one's own views and opinions, and that academic argument involves critical engagement with existing sources.

Both studies indicated that instruction in authorship should be combined with very concrete instruction on citation, referencing and paraphrasing, for the focus groups revealed considerable uncertainty about this, and the questionnaire study showed that knowledge to avoid plagiarism did not increase significantly after year 2. Of course, many students already receive instruction in citation and referencing, which has apparently not affected rising levels of plagiarism, and previous interventions have focused very narrowly and specifically on those writing skills (Barry, 2006; Homewood, 2007; Landau et al., 2002; Schuetze, 2004). Perhaps what the present findings indicate is that instruction in technical aspects of citation, referencing and paraphrasing may be more effective when combined with measures to enable and encourage students to think of themselves as authors and construct and adopt more authorial identities as academic writers.

Two factors should be taken into account when considering the generalisability of the findings. First, the questionnaire study and recruitment for the focus groups took place during timetabled classes which all students taking the relevant modules were expected to attend. Class registers were not taken although these classes were well-attended and the samples are broadly representative of the population of enrolled students at each university, which were all large, fairly typical post-1992 London universities. Inevitably, however, the studies do not represent the attitudes and beliefs of any students who were not present. The decision not to collect any personal information from students was linked to the sensitivity that surrounds the issue of plagiarism, which might have affected students' responses had they been asked for details that could potentially have identified them. Students who attend classes less frequently and are hard to reach in other ways may differ in terms of authorial identity and approaches to writing, and studying their attitudes and beliefs may require different research strategies.

Second, the participants were all psychology students, and student authorial identity may be different in other disciplines. Psychology students are generally discouraged from writing in the first person, and psychology teaching generally places a strong emphasis on the importance of objective evidence and the avoidance of anecdote in student writing. Those aspects of the discipline may mean that psychology students face greater challenges than others in constructing authorial identities.

To conclude, these findings seem to indicate that authorial identity, a concept that was developed mainly from textual analyses and work on academic literacy and composition, and was previously applied mainly in the context of students writing in English as a second language, may be more widely applicable as part of mainstream efforts to understand student writing. More research is needed, but the preliminary indications are that problems with authorial identity could provide part of the explanation for certain forms of unintentional plagiarism. Students' attitudes and beliefs in relation to writing and plagiarism are complex, so there will probably continue to be benefits in using a combination of qualitative and quantitative approaches in research in this area. Further research could take forward the measurement of constructs related to authorial identity, or could focus on specific groups such as international students, dyslexic students, or those suspected or accused of plagiarism, or could develop and evaluate interventions to promote student authorial identity.

References

Abasi, A.R., Akbari, N. & Graves, B. (2006). Discourse appropriation, construction of identities, and the complex issue of plagiarism: ESL students writing in graduate school. *Journal of Second Language Writing*, 15, 102-117.

Ashworth, P., Bannister, P. & Thorne, P. (1997). Guilty in whose eyes? University students' perceptions of cheating and plagiarism in academic work and assessment. *Studies in Higher Education*, 22, 187-203.

Barry, E.S. (2006). Can paraphrasing practice help students define plagiarism? *College Student Journal*, 40, 377-385.

Bennett, R. (2005). Factors associated with student plagiarism in a post-1992 university. *Assessment and Evaluation in Higher Education*, 30, 2, 137-162.

Bonnett, A. (2001). *How to Argue: A Student's Guide*. Harlow: Pearson Education.

Branthwaite, A., Trueman, M. & Hartley, J. (1980). Writing essays: the actions and strategies of students, in: J. Hartley (Ed.) *The Psychology of Written Communication* London, Kogan Page.

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology,* 3, 77-101.

Caruana, A., Ramaseshan, B. & Ewing, M.T. (2000). The effect of anomie on academic dishonesty among university students. *International Journal of Educational Management*, 14, 1, 23-30.

Cherry, R. (1988). Ethos versus persona: self-representation in written discourse. *Written Communication*, 5, 251-276.

Diekhoff, G., LaBeff, E., Clark, R., Williams, L., Francis, B. & Haines, V. (1996). College cheating: ten years later. *Research in Higher Education*, 37, 487-502.

Dordoy, A. (2002). Cheating and plagiarism: student and staff perceptions at Northumbria. In A. Dordoy & C. Robson (Eds.), Proceedings of the Northumbria Conference – Educating for the Future. Northumbria University, Newcastle upon Tyne, UK. [www.jiscpas.ac.uk/images/bin/AD.doc].

Entwistle, N., Tait, H. & McCune, V. (2000). Patterns of response to an approaches to studying inventory across contrasting groups and contexts. *European Journal of Psychology of Education*, 15, 33-48.

Franklyn-Stokes, A. & Newstead, S. (1995). Undergraduate cheating: who does what and why? *Studies in Higher Education*, 20, 159-172.

Harrington, K., Elander, J., Norton, L., Reddy, P., Aiyegbayo, O., & Pitt, E. (2006). A qualitative analysis of staff-student differences in understandings of assessment criteria. In C. Rust (Ed.), *Improving Student*

Learning 13: Through Assessment (pp 235-247). Oxford, Oxford Centre for Staff and Learning Development.

Hatch, J.A., Hill, C.A. & Hayes, J.R. (1993). When the messenger is the message: Readers' impressions of writers' personalities. *Written Communication*, 10, 596-598.

Henry, J. (1994). A narratological analysis of WAC authorship. *College English*, 56, 810-824.

Homewood, J. (2007). *An active approach to preventing plagiarism and increasing generic skills in new undergraduate students: the PSY104 project*. Paper presented at the Higher Education Academy Conference, 3-5 July 2007, Harrowgate, UK.

Howard, R.M. (1995). Plagiarisms, authorships and the academic death penalty. *College English*, 57, 788-806.

Ivanic, R. (1995). Writer identity. *Prospect*, 10 (1), 8-31.

Ivanic, R. (1998). *Writing and Identity: The Discoursal Construction of Identity in Academic Writing*. Amsterdam: Benjamin.

Keck, C. (2006). The use of paraphrase in summary writing: a comparison of L1 and L2 writers. *Journal of Second Language Writing*, 15, 261-278.

Landau, J.D., Druen, P.B. & Arcuri, J.A. (2002). Methods for helping students avoid plagiarism. *Teaching of Psychology*, 29, 112-115.

Lavelle, E. (1993). Development and validation of an inventory to assess processes in college composition. *British Journal of Educational Psychology*, 63, 489-499.

McCabe, D. L. & Treviño, L. K. (1993) Academic dishonesty: honor codes and other contextual influences. *Journal of Higher Education,* 64, 522–538.

McCabe, D. L. & Treviño, L. K. (2002) Honesty and honor codes. *Academe*, 88, 37–42.

Park, C. (2003). In other (people's) words: plagiarism by university students--literature and lessons. *Assessment and Evaluation in Higher Education*, 28, 471-488.

Pecorari, D. (2003). Good and original: Plagiarism and patchwriting in academic second language writing. *Journal of Second Language Writing*, 12, 317-345.

Read, B., Francis, B., & Robson, J. (2001). 'Playing safe': undergraduate essay writing and the presentation of the student 'voice'. *British Journal of Sociology of Education*, *22*, 387-399.

Richardson, P.W. (2004). Reading and writing from textbooks in higher education: a case study from Economics. *Studies in Higher Education*, 29, 505-521.

Roberts, D.M. & Toombs, R. (1993). A scale to assess perceptions of cheating in examination-related situations. *Education and Psychological Measurement*, 53, 755-762.

Roig, M. (1997). Can undergraduate students determine whether text has been plagiarised? *Psychological Record*, 47, 113-122.

Roig, M. (1999). When college students' attempts at plagiarism become instances of plagiarism. *Psychological Reports*, 84, 973-982.

Schuetze, P. (2004). Evaluation of a brief homework assignment designed to reduce citation problems. *Teaching of Psychology*, 31, 257-259.

Torrance, M., Thomas, G.V. & Robinson, E.J. (2000). Individual differences in undergraduate essay-writing strategies: A longitudinal study. *Higher Education*, 39, 181-200.

Valentine, K. (2006). Plagiarism as literacy practice: recognising and rethinking ethical binaries. *College Composition and Communication*, 58, 1, 89-109.

Warn, J. (2006). Plagiarism software: no magic bullet! *Higher Education Research and Development,* 25, 195-208.

Wells, D. (1993). An account of the complex causes of unintentional plagiarism in college writing. *WPA Writing Program Administration*, 16 (3), 59-71.

Appendix 1. The Student Authorship Questionnaire (SAQ)

This is a questionnaire to collect student views about authorship. This is an anonymous survey so please don't write your name on the questionnaire. Please tick a box to show how much you agree or disagree with each statement.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. I know what it means to be the author of a piece of written work	o	o	o	o	o
2. I know what the responsibilities of an author are	o	o	o	o	o
3. I would never be accused of plagiarism	o	o	o	o	o
4. I know how to provide references for citations and quotations in my written work	o	o	o	o	o
5. I enjoy writing in my own words	o	o	o	o	o
6. I find it difficult to express psychology concepts in my own words	o	o	o	o	o
7. When writing an assignment I begin by thinking about what I want to say, and then look for evidence relating to that	o	o	o	o	o
8. I know how to show which parts of my assignments were not written by me	o	o	o	o	o
9. Writing a psychology assignment is all about finding material in books, journals and the internet and arranging it in the form of an essay	o	o	o	o	o
10. I just don't have time to put everything in my own words when writing an assignment	o	o	o	o	o
11. I get better marks when I use more material taken directly from books, journals or the internet in my assignments	o	o	o	o	o
12. I know what it means to express a concept or idea in my own words	o	o	o	o	o
13. When writing an assignment I begin by looking for material I can include and then think about how I can put it together	o	o	o	o	o
14. Writing a psychology assignment is all about making an argument based on my own thoughts about the subject	o	o	o	o	o
15. I am confident that when I write something about psychology it will look impressive	o	o	o	o	o
16. I am afraid that what I write myself about psychology will look weak and unimpressive	o	o	o	o	o
17. I get higher marks by writing more of my assignment in my own words	o	o	o	o	o

	0-20%	20-40%	40-60%	60-80%	80-100%
18. What proportion of your written assignments would consist of quotations or material taken directly from a book, journal or the internet?	o	o	o	o	o

Thank you very much

Appendix 2. Scoring instructions

Scoring

Items 1-5 and 7-15: strongly disagree = 1, disagree = 2, neutral = 3, agree = 4, strongly agree = 5.
Items 6, 16 and 17: strongly disagree = 5, disagree = 4, neutral = 3, agree = 2, strongly agree = 1.
Item 18: 0-20% = 1, 20-40% = 2, 40-60% = 3, 60-80% = 4, 80-100% = 5.

Scale scores

Confidence in writing = (5 + 6 + 12 + 15 +16) / 5
Understanding authorship = (1 + 2) / 2
Knowledge to avoid plagiarism = (3 + 4 + 8) / 3
Top-down approach to writing = (7 + 14) / 2
Bottom-up approach to writing = (9 + 13) / 2
Pragmatic approach to writing = (10 + 11 + 17 + 18) / 4

Note: The word 'psychology' could be replaced with the name of the relevant discipline or the words 'my subject' in items 5, 9, 14, 15 and 16.