Title: A model of professional self-identity formation in student doctors and dentists: A mixed method study

Authors:

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Author's response to reviews: see over
Dear Editor

We’d like to thank the reviewers for their constructive and thought provoking comments. We have taken these on board in our revisions. Below we have responded to the specific changes requested by the reviewers. We have highlighted the revisions in the revised submission.

1. Two of the reviewers (Reviewers 1 and 2) have questioned the significance of selecting the subjects based on PSIQ changes of two scale points. We have explained this in lines 113-114 and 144-5. We particularly wanted to interview participants who are more likely to have had significant experiences that influenced their PSI. We identified these participants by selecting the participants who showed the largest change in their professional identity rating from one year to the next as shown by the self ratings on the PSIQ. No statistical or theoretic significance is attached to or claimed for 2 scale points.

2. Reviewer 1 has questioned the terms transference and counter transference. As the reviewer says these words are used to describe psychological processes in the context of psychotherapy. However, the terms also have a modern socio-cognitive meaning. In this literature, the terms carry their original (and very helpful) technical meaning, but are used in more everyday contexts so that “transference is used: “When people meet a new person that reminds them of someone else, they unconsciously infer that the new person has traits similar to the person previously known.” See, for example the work of Andersen and Berk: Andersen, S. M. & Berk., M. (1998). The social-cognitive model of transference: Experiencing past relationships in the present. Current Directions in Psychological Science, 7(4), 109-115.
Our model is novel and, as acknowledged by Reviewers 1 and 3, extends the knowledge in this area further. We have applied terms which we feel describe the underlying mechanisms effectively. We take on board, reviewer 2’s reflection about whether we have chosen the right terms. On further reflection, we feel that these terms accurately represent the data. It could be argued that lines 250-256 (now 261-267 because of additions) demonstrate a Pygmalion or Rosenthal effect where if one (participant) thinks that something will happen, they may unconsciously make it happen through their actions or inaction; there are similarities to this and the process of transference. Our data demonstrates those ideas around what being a professional is, is given by others’ (peers, or seniors); a process we call transference. This leads the participant to unconsciously or consciously modify their professional self-identity (lines 231-9, and 261--7).

3. We accept Reviewer 1’s comment that PI is continual process that develops throughout training. What we are saying is that appropriate experiences and relevant mechanisms, can enable the graduating doctor to feel more like a ‘doctor’ or less like a ‘doctor’ (185-193). Indeed we did not intend the reader to consider that students can have fully developed PIs; we explain this in lines 311-313; that students do not develop their identity at the same rates, nor is there one view of what a developed identity is. We have now added to this discussion to clarify this point and that PSI development is not complete at graduation but it is an ongoing process (lines 325-9; 378-380).

4. In light of reviewer 2’s comments, we have removed the word grounded so that readers do not misunderstand that we have employed grounded theory. We initially used the word grounded to explain, that our model is grounded in data; but now we have rewritten these sections to clarify our method (Please see lines 22, 27 and 95-6).

5. We have defined identity (lines 17-18), professional role (lines 166-7) as per reviewer 2’s comments. We have not defined ‘self’ as we feel it is not a specialist word. We have explained what we mean by professional role. In line 196 we said ‘growing understanding of the role, and a developing sense of self-identity’; not ‘growing sense of self-identity’. We have now amended this to ‘a developing sense of professional self-identity’ (line 206). We have not defined professionalism. The literature contains so many variations we do not think that we could do justice to a discussion of the definitions but have left it to the readers’ own understanding of the concept.

6. Reviewer 2 challenges our claim that we remained theoretically blind during data analysis and would like us to moderate our claim. We developed the model purely from a consideration of the data (i.e., a bottom up approach). Please see Galotti (2013). Cognitive Psychology in and out of the laboratory. 5th Edition. Sage Publications, inc. Chapter 3. for an explanation of the differences between bottom up and top down processing of data analysis. Bottom up approach is also known as data driven approach; where understanding of the data is sought without relying on prior expectations or theories. We checked for concordance between co-authors in the conclusions they drew from the data (27-9, 136-8).
7. The illustrative quotes are tagged with the participant number to demonstrate whether the quotes are from the same person or different persons, their stage in the training and the gender. This is a means of differentiating the quotes for the authors and readers. We feel that it is important that readers have a picture of ‘who’ the quotes are from and therefore have not amended this in the revised submission as per reviewer 2’s request.

8. We have provided further clarification about the claim in Line 283 (294-7); that our claim is from the literature review rather than from our own data.

9. Reviewer 2 requested clarification about lines 311-4 (now 325-9); we have further explained the context of the two statements ‘what is it that I need to become’ and ‘am I capable of becoming what I need to be’.

10. As per reviewer 2’s comment about line 35 (which was line 335 not 35 and now 357-8), we have revised this sentence to ‘a range of experiences and mechanisms’.

11. It is challenging to do full justice to the range and complexity of professional identity literature available in medicine and dentistry in one paper. But we thank reviewer 2 for the comment and have now added to the literature review to indicate that dental literature has contributed much to the development of the professional identity literature (lines 56-60).

12. As reviewer 2 states, we have used the term ‘professional self-identity to indicate that it means student perceptions of their professional self. We have taken the reviewer’s suggestion on board to add the word ‘self’ in the title.

13. As per reviewer 2’s comments we have now rewritten lines 97-8 (now 101-2) to improve the grammar of this sentence.

14. We have expanded on study limitations (lines 345-353).

15. We agree with reviewer 2 that we are unable to fully consider the complexities behind the role of social identity theory or the role of interprofessional tensions in identity construction in the current data and the current paper. We have however, left the Frost and Regehr reference as it is a seminal paper providing a comprehensive overview of the role of diversity and standardisation of experiences in identity formation. (lines 85-7)

16. As per reviewer 2’s comments, we have now explained that in the UK, acquiring basic teaching competencies is a requirement of graduating doctors and that it is common for students to seek additional teaching experiences through extracurricular activities such as student society projects (in lines 157-60).

17. We thank reviewer 2 for pointing out that using the interviewer’s question as part of the quote, may be inconsistent. The consistent approach we have used is to include the
interviewer question whenever the respondent’s statement is not free-standing. Where the respondent make a statement that is complete and sufficient on its own, we have not included the question. Where the respondent makes a statement that is incomplete – for example starting with an incomplete sentence where the question is required to fully understanding the meaning – then we have included the question.

18. We accept reviewer 3’s point that a number of our findings are not new and have been addressed by other authors. This is specified in the discussion (please see lines 303-321). However, we believe that this is the first paper to provide a data driven model describing the processes involved in the development of professional identity (as commented by Reviewer 3); the concepts of participation (which allows trying out and visualisation) are articulated in previous seminal work. However, the different processes are not brought together in any of the other papers, in a model, to explain the process of identity development. This model as clarified by this reviewer provides a way of evaluating progress in the development of professional identity.

19. We have taken the point of reviewer 3 that this work is not presented as theoretical basis for professional identity but as a way of evaluating progress in the development of professional identity. We have rewritten the paper accordingly (please see lines 41-42).

20. We have checked for grammatical errors and have rewritten accordingly to improve grammar and clarity of intended meaning. Please see lines 33, 49-51, 66-71, 74-5, 78-82, 91-2, 97, 167, 169-170, 172, 182, 201, 274, 287, 322, 330, 332-4, 336-7, 354, 384, 386, 389.

We thank you sincerely for your time in considering the revised version of the paper for publication.

Yours sincerely

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