Psychology internship: an evaluation using Communities of Practice and Motivation Theory
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Introduction
A research internship offers Higher Education students the opportunity for experiential learning and a valuable opportunity to gain important skills to support completion of a degree or future work in a research environment. Researchers suggest that experiential learning moves learners from passive recipients of information to taking control and responsibility of their learning through experience (Kolb & Kolb, 2005). Therefore, an internship experience can result in students taking a more active role in their learning experience and it can encourage greater links across the learning curriculum. Furthermore, Kardash (2000) demonstrates that interns and their supervisors report an increase in research skills following an internship. Increases in five particular research skills are reported, observing and collecting data, understanding the importance of controls, interpreting data, orally communicating the results of research projects and thinking independently. As opportunities for undergraduates to participate in internship schemes increase, it is becoming important to explore the structure and process of an intern’s involvement in the research community and consider how this may differ from a more traditional learning experience.

This paper offers an independent evaluation conducted by the authors, two psychology undergraduates who participated in the research internship scheme at the University of Central Lancashire in the summer of 2009.

1. Theoretical framework
Communities of Practice
Internships have been modelled on apprenticeship styles of learning and are thought to involve ‘situated learning’: learning that takes place in the same context it is applied. This compares to more traditional learning that tends to be that is abstract and takes place outside of the complex social environment that knowledge would be applied in real world encounters (Andeson, Reder & Simon, 1996). Situated models of learning suggest that conceptual knowledge is best acquired within the situations in which it is learned and used (Kardash, 2000). Lave and Wenger’s (1991) theory of situated learning has been used as a framework to assess workplace learning (Fuller, Hodkinson & Unwin, 2005) and counselling internships (Woodside, Zieger & Paulus, 2009). Wenger’s Communities of Practice framework (1998) and Lave and Wenger’s (1991) concept of Legitimate
Peripheral Participation offer an exploration of the learning experience within an internship, as they propose that learning is situated in the communities in which such knowledge is practised.

Lave and Wenger (1991) suggest that newcomers to a community of practitioners join as legitimate peripheral participants and, through participation, mastery of knowledge and skill enables them to move towards full participation in the practices of the community. This legitimate peripheral participation is viewed as a transitional and the process is seen as increasing participation in a community towards full participation (Lave & Wenger, 1991). Learning takes place ‘through modified forms of participation that are structured to open the practice to non-members ... peripherality and legitimacy [are] required to make full participation possible’ (Wenger 1998, 100). Peripherality is achieved through: reduced intensity and risk, special assistance, reduced cost of error, close supervision or reduced production pressures.

The internship experience for undergraduates is interesting as, unlike an apprenticeship, the practical experience is a temporary one and participants return to the student or vocational world following it. It is particularly interesting to reflect on experiences in the light of legitimate peripheral participation as the temporary nature of the experience is likely to impact on how interns experience the involvement in a research community and how they are integrated back into a student community. This directly compares with the apprenticeship experiences explored by Lave and Wenger (1991) and the workplace relationships examined by Wenger (1998).

**Motivation theories**

Lave and Wenger’s (1998) Communities of Practice framework does not examine motivation explicitly, motivation is seen as embedded in the social context and within identity as a participant in the community of practice. There have been few analyses of motivation of interns during an internship programme (Johari & Bradshaw 2008), yet it is important to explore motivation for participation in an internship, as motivation is considered essential for learning (Christophel 1990). Lave and Wenger suggest that ‘a person’s intentions to learn are engaged in practice and the meaning of learning is configured through the process of becoming a full participant in a socio-cultural practice’ (1991, 29). They argue that motivation is seen in the identity or membership itself; that is, in being a member of the community and an agent of the activity.

In comparison, contemporary theories of motivation focus on the motivation from within the individual (Eccles and Wigfield 2002). Attribution theory (Wiener 1992, cited in Eccles & Wigfield,
2002) suggests that motivation is dependent on how individuals attribute cause to events. An individual’s attribution of their achievements determines their future motivation and strivings. Bandura (1989) argues that it is self-efficacy that determines an individual’s level of motivation. Self-efficacy is defined as ‘an individual’s confidence in their ability to organize and execute a given course of action to solve a problem or accomplish a task’ (Eccles & Wigfield 2002, 110). Similarly, self-determination theory (Deci & Ryan 1985, cited in Eccles & Wigfield 2002) suggests individuals are internally motivated when they feel competent and self-determined.

2. Research Questions
Since the researchers who conducted this study are the authors themselves, this article represents the analysis of self-reflective texts and interview transcripts involving the researchers directly as participants in the study.

The researchers aimed to reflect on their own experiences as participants of the internship scheme and to evaluate their participation in a) the research process, b) their supervision and c) their integration into the research community. In addition, motivational processes were examined, to explore whether motivation for participation reflected contemporary individual motivation theories, or was embedded in the process of moving towards full participation within a community of practice.

3. Method
Internship research projects
The authors / participants took part in different internship projects, supervised by different members of the academic staff in the School of Psychology. Both also participated in an exhibition at the end of the internship that involved creating a poster to display the research activities and the results of each research project. The experience was similar to a poster presentation at an academic conference.

Data sources
Personal reflective case studies were written based on questions pre-selected by the researchers (these questions can be found in the Appendix). The two participant-researchers individually wrote answers in response to these questions. This was then followed by a semi-structured group interview with an independent facilitator, based on the questions used in the individual reflective
texts. This resulted in two data sources for analysis, the personal responses and the interview transcript.

**Data analysis**

A thematic analysis (Braun & Clarke 2006) of the data was carried out using an inductive approach; that is data was analysed in a data-driven way without a theoretical framework or coding system. The researchers acknowledge that data analysis was likely to be influenced by their own personal reflections (as both researchers were participants) and by the theoretical standpoint of communities of practice and motivation theories. However, the researchers intended that an inductive approach to thematic coding would focus on the data to ensure a rich exploration of meaning in the data set. They also agreed that any personal reflection that influenced the thematic analysis is of relevance to the research questions, as it addresses meaning attached to the experiences of the participant-researchers.

Following the approach suggested by Braun and Clarke (2006) individual responses to the questions and the group interview were line-by-line coded. The case studies were coded independently by researchers so that each researcher coded their counterpart’s case study and not their own. In comparison, the interview data was not separated for coding and analysed in its complete form. Themes arising from coding were defined and assigned. The researchers then mapped out themes diagrammatically.

The researchers delayed a review of relevant literature and a thorough reading of Lave and Wenger (1991) and Wenger (1998) and motivation theories until coding and thematic analysis was complete, to enable analysis to be data driven rather than driven by theoretical assumptions.

**4. Results**

Four over-arching themes emerged from the case studies and interview transcript. These are represented diagrammatically in Figure 1: role, community, motivation and transition. The themes are drawn hierarchically with the most prominent arising themes from line-by-line coding are represented in the large ovals. These overarching themes were then grouped together into sub-themes (rectangles) following researchers discussion.
Role

The interns discussed their internship experience as taking on a role as a researcher. Comments were made by both researchers about their identities as researchers. Rebecca stresses the importance of taking on a role as an identity:

I don’t feel like I wasn’t involved, it just was difficult at times to ... get a hold of what my role was, ... I could put a hat on that said, ‘Ok I’m just here to collect data’, but clearly I wasn’t ‘cos they [the supervisors] wanted me to do all the reading and they got me to do literature reviews and then sort of critique the different literature we found, so they were clearly wanting to involve me. So it was just a bit confusing to kind of get ‘Who am I here? What am I ...’.

For Claire the difference in the project she was undertaking and her familiarity with her supervisor enabled her to take on a role as researcher earlier on. She comments:

I think that happened for me with [my supervisor] very quickly ... there was a very quick, sort of very definite [involvement] ... making me feel like an equal ‘cos, I don’t think ... [the supervisor] ever at any point really viewed me just as a student. As far as
... [the supervisor] was concerned, I was ... [the] research partner, but it took me a little while to realise that.

It was important for the two interns that they felt they could provide a valuable input to the project and had a good understanding of the role, in order for them to take on an identity as a researcher. Claire reflects on feeling that she could provide a valuable input:

This was a great opportunity to witness how collaborative research works; I feel I was also able to provide some input to this larger project, which again made me feel like I was an integral part of the research being conducted.

In comparison, Rebecca states that ‘I didn’t have that same feeling ... of feeling on equal par, even when I had those discussions ... so I was having these debates, but I was still very much the student ...’. However, as Rebecca’s knowledge of her subject grew, her ability to contribute to the project increased. She comments, ‘I felt ... my knowledge grew from the reading, I was more able to interact in conversations about the subject matter and results’.

Community
When Rebecca and Claire discussed the interactions that they had with others around them, their discussions centred around two research communities: the staff in the department and the other interns. Rebecca comments on the support she received from her supervisors: ‘to give me ownership of the project of [sic] people I was working with [supervisors] spent an awful lot of time ... they scheduled in their planning that they would have time to give me the time to do the reading and then have time to have sort of critical debate with me, so I think they made provision for that to happen’.

Claire also explained the support she received from her supervisor:

we met at least every two weeks, but more often than not every week to check in and talk about what needed to be done for the week after. At first both of us were unsure, but we both have very similar ways of working. We are both perfectionists, and we both like to be really busy. We recognised this in each other within a couple of weeks, and that allowed us both to relax. [My supervisor] ... could trust me to do the work,
and do it well; and I knew I could trust ... [my supervisor] to always be on hand when needed and to spot anything that I had missed.

For both Claire and Rebecca the community of interns provided support and encouragement, along with a social network. For Rebecca this intern community provided reassurance about her role:

that was invaluable to me because there was times when I was like [sic], ‘I want to know what I’m going to be doing’ and it was just nice to hear other people saying ‘I don’t know what I’m going to be doing’. ... So it was nice to know that other people were feeling the same way as me.

For Claire the social network aspect of the intern community was important in regulating her working time:

Very quickly the other interns introduced themselves to me and we started taking breaks together getting coffee. This was sometimes much needed; I think we were all quite prone to spending too long working and not taking breaks, so in a way we regulated each other, making sure we took breaks and didn’t get too bogged down [sic].

Claire also talked about the similarities between the intern community and what she refers to as the community of ‘real researchers’:

I think our little network of interns was very much the same as the network of lecturers we were working with. We all had hard times through the ten weeks, days when nothing seemed to be going right, and we all had each other to moan to, to get advice from and generally to just support us. From what I have seen of other researchers I get the impression that it is no different for them.

**Motivation**

Discussion about motivations for the participation in the internship centred around two main themes: the practical considerations and the opportunity to experience research. For Rebecca, the practical considerations were very important, she explains this:
To be honest I hadn’t really planned to do it; I had seen the advertising but not really considered it as I worked part-time and would not be able to commit to the project full time. ... If it had not been a paid post I would not have even considered doing it. In fact the experience has made me re-think working and studying and I haven’t returned to work after the internship so I have time to concentrate on my studies in my final year.

For Rebecca the two sub-themes were intertwined in her discussions in the interview, she talked about how the practical considerations and experience of research were both major motivators. The research experience was invaluable, but without the financial aspect of the internship she would not have been able to gain that experience:

had it have not been a funded opportunity, ‘cos obviously we were paid whilst we were doing it, umm, I wouldn’t have even have had the opportunity to even look into teaching and research, ‘cos I’ve had to work whilst I was doing a degree. So for me, it’s kind of honed in on what I want to do, and I know that I want a career in teaching and research; so it’s kind of simplified my options for me.

In Claire’s discussions the two sub-themes were also intertwined, though for her the process was a move from one of being extrinsically motivated to intrinsically motivated, ‘I applied for the internship scheme for two reasons, one was that I needed a paid summer job and the second was because I wanted to gain experience of “real” research.’ In another extract, ‘The money I was being paid, which at the beginning was a large motivator, became a secondary consideration and I found myself doing the work simply because I enjoyed it’.

**Transition**

Claire and Rebecca discussed the transition from intern back to student in their reflections. Since the internships were completed in the summer between their second and third years as undergraduates, both interns had to move back into the community of students. This moving away from the research community produced mixed feelings in both of the interns.

On the positive side two themes emerged: confidence and research skills. For both Rebecca and Claire the internship experience provided them with confidence about their future careers, albeit in
different ways. For Rebecca this confidence related to the experience helping her to gain future employment; she explained ‘I have gained research experience that I can put on my CV which will help me to get a job in the future’.

For Claire, it was more about gaining confidence in her career choice, ‘... I have realised with complete certainty that I want a career as a researcher and lecturer. I know that this is a job I will be happy to spend the rest of my life doing’.

They both commented on skills they had gained and discuss how they perceived their dissertation very differently because of the internship experience. Rebecca explains:

because we were in the second year, when I came back in September it was like I was still perceiving myself as the researcher doing this piece of research, and it was quite obvious that I was speaking about my third year project in a completely different language almost [sic].

Claire discussed how her approach to her studies had also changed:

after the internship, I came to approach my third year project, it was very definitely [mine], this was my piece of research; ... I’m designing it, this is what I want to research on ... ‘cos I was interested in it, and the end product of writing my dissertation and handing it in, is sort of like, ok well someone’s gonna [sic] read and mark it, but actually I was more interested in doing that research and finding out the answers to the questions that I’d asked – than getting the mark’.

However, in the interview it also became clear that the transition back to being a student was not all positive, the internship did have some negative aspects; these related to two themes: impact on their studies and their changing roles.

With the exception of the dissertation, both Claire and Rebecca lacked interest in their degree studies. Rebecca reports her lack of motivation for reading and revision, ‘I know why I’m not being very good at the revision and the reading, ‘cos ... I’m just into the research now’.

Claire describes a lack of interest in the lectures and some of the reading material:
And then having to go back and going into lectures and having to read on topics that ... yeah [sic], they’re interesting, but I’m not gonna [sic] spend the rest of my life looking at this, so I don’t really want to do the reading for this. And it’s really hard to keep the motivation up to get the degree ... I feel like rather than it was something really interesting and I was interested in all these different topics, now I feel I’m jumping just through these particular hoops to get my degree at the end so I can then go on and do my PhD and it’s my research again.

The lack of motivation for academic study may be the result of a return to the more passive academic learning, a stark comparison to the active, experiential learning experienced in the internship by the interns (Kolb & Kolb 2005).

For Rebecca, the transition back to the student role was frustrating and she expressed this in relation to the abruptness of the ending of the project, ‘just like a window into a job that we might do in the future, then obviously it’s just, like, gone again’, and in relation to her ongoing work with her internship supervisor:

I’ve carried on doing what I was doing for the internship, but I’m no longer, I’m now just a student. [laughter] And that’s quite strange as well because when I started collecting data, obviously I had a room that I was collecting data in and it was the summer holidays: it was dead easy. Trying to do that when all the students are there, and there are issues about uses of rooms ... Although I got the same room, I didn’t have as much ownership of it, obviously ‘cos it was still being used for other purposes, so it was quite tricky; everything became much more trickier.

Claire discusses how she continued to view herself as a researcher following the internship and continues to identify herself with the staff:

... definitely after the internship I was very much more happy going knocking on their doors and talking to them and chatting to them in corridors and that sort of stuff, you know. It changed my idea of my sort of perspective on the staff in the department ... I sort of did start to feel more in line with the rest of them, it’s like, yeah they’re all researchers just like I am.
The meaning of a researcher for Claire and Rebecca is embedded in their understanding of the role of lecturer and researcher as different from that of the student. This reflects a perceived clash of roles within the research community. Whether or not a clash of these two roles (student and lecturer), is an actuality, it is certainly expressed in the interns’ discourse, and hence, experienced by them both.

5. Discussion

Communities of Practice

In their discussions both participants expressed the importance of forming an identity in the research community. This reflects Lave and Wenger’s (1991) suggestion of a community of practice and an individual’s desire to become part of this. This also seems to suggest that motivation is embedded in this context; that is, participants were motivated by participation within the community.

Supervisors engaged interns by encouraging legitimacy and limiting participation, particularly in the early stages of the projects. The interns expressed the need for providing a valuable input to the project. This appears to have been achieved by involving the participants to a degree to which they are able to be involved. Thus, one participant was involved from the outset, whereas the other needed time to engage with the literature in order to feel involved. This perhaps represents the peripherality of their participation in the process and ways in which participation was modified to open the practices to the interns as newcomers. Thus, one intern’s involvement was supported through close supervision and the other’s participation was modified through a lessening of intensity and production pressures giving them time to absorb the research literature.

This process of participation did have a downside, however, as for both these interns it made it difficult to return to student life following the end of the internship. The participants began to identify themselves as researchers and participants in the research community, but felt they lost this identity on returning to being students. This may be due to their meaning of research as embedded in the role of lecturer and returning to the student role meant for these interns leaving research behind them. This demonstrates the perception that students are not undertaking research but assignments. In the interns’ discourse they do acknowledge a strong ownership of their dissertation and note the research skills they feel they developed, but they also express the frustration of returning to student life, perceived as separated from the research community.
The research community was central to motivation and identification of a role as a researcher. As the interns took on the researcher’s role they became legitimate peripheral participants and began a move towards full participation in the research community. However, as the internship was a temporary situation the interns had an abrupt ending to their involvement in the community and their role as researchers. This is reflected in both the case studies and interviews, in their frustration in their return to being a student. Although Lave and Wenger (1991) do not directly mention overlapping of communities, the difficulties experienced by the interns can be explained in relation to their framework, by the perception of role of student as a participant in another community of practice, and this may clash with their perception of the research community they were temporarily in.

**Motivation for the internship**

The participants’ reflections suggest a dual motivation for taking part in the internship, an intrinsic and extrinsic one. Both participants discuss the opportunity to gain research skills and experience, but also the financial incentive for taking part in the internship. These motivations are individually determined and are not as Wenger (1998) would suggest embedded in the community of practice.

However, a further examination of the interns’ discussions suggests that support from others was necessary to maintain motivation whilst enrolled in the internship programme. They both acknowledge the importance of support from supervisors and from other interns. It appears then that maintenance of motivation was embedded in the research community. Furthermore, in the interns’ reflections, identity as a researcher emerges as an important theme. Although initial motivations are particularly individually determined, once the internships commence, the interns’ motivation becomes, as Wenger (1998) suggests, directed towards identity with the community of practice. The interns discuss the need to have a valuable input into the community of practice, suggesting a desire to be legitimate participants. Thus, their motivations appear to be embedded within the social context of the research community.

There is absence in the interns’ reflections of motivation directed by self-efficacy, self-determination or casual attributions. However, it could be argued that the processing involved in the maintenance of motivation expresses the need for acknowledgement of ability to take on the researcher’s role. Interns discussed the role of the intern support network in boosting their confidence about their role as a researcher. This tends to support the argument that motivation is expressed in an individual’s
perceived capabilities and worth in the practice, the intern support network assisted in the maintenance of this self-efficacy (Bandura, 1989).

The ways that interns’ motivation may relate to the Communities of Practice Framework (Lave & Wenger 1991; Wenger 1998) during the internship programme is represented in Figure 2. Both the sub-community of interns and supervisors played an important role in maintaining motivation of the interns throughout the internship process. It could be suggested that this embedding of motivation in the support of others from within the research community moves the individual towards a more central participation in the research community, from legitimate peripheral participation towards full participation.

![Figure 2 Diagrammatic representation of the motivation of interns](image)

**Implications for practice**

One of the important implications for practice in this research is the impact that returning to student life had on the participants. This transition caused frustration and anxiety and more importantly difficulties with motivation for degree studies. Therefore, it would be important for scheme organisers and supervisors to be aware of the difficulties that may be faced by interns when the scheme ends. Supervisors could make interns aware of difficulties they may have and encourage discussion of any anxieties and concerns. In addition, organisers could plan an event to mark the end of the programme. The programme did end with an exhibition, but this type of activity in itself is very much part of the research process and is unlikely to be viewed as an ending by all interns.

The naturally occurring support network of interns in the Psychology department appeared to be crucial to the maintenance of motivation for these two interns. This suggests that use of support networks for interns could be made throughout the scheme, and could support interns’ motivation.
It is likely that the proximity and number of interns within the psychology department encouraged the formation of this support network. It is therefore unlikely that this would occur in other departments or programmes where access to other interns may be geographically difficult and where there is only one intern in a department. With this in mind organisers of an intern programme can encourage the formation of such support networks or create them more formally.

The current research suggests that effective supervision of interns involves the participation of the intern from the outset of the research project. This is particularly effective where the supervisor ensures that the participation is legitimate by ensuring that the intern has an ability to provide some valuable input to the project. The research also suggests that the supervisor can support the intern by providing modified forms of participation in the research process, such as lessening the intensity, in this case, by providing reading time at the commencement of the internship.

6. Conclusion
The interns’ participation in the research community appears to follow the pattern suggested by the Communities of Practice framework (Lave and Wenger 1991; Wenger 1998). Interns were motivated by a desire to become a legitimate participant in the research community. Supervisors assisted this process by providing modified forms of participation enabling interns to feel that they were making a valuable input to the project. This motivation to move towards a full participation within the community was further supported by social support enhancing interns’ confidence with respect to taking on the role of a researcher. This research has implications for future practice; it is suggested that an ending is provided for interns to support transition, formation of intern support groups is encouraged and effective supervision is provided for interns by involvement from the outset through modified forms of participation.

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**APPENDIX**

**Individual and interview questions for interns**

What year of study were you in when you applied for the internship?

Was the internship in your own school?

Had you worked with your supervisor before? If yes, in what capacity?

Please describe your input to the project:

Did you interact with staff other than your supervision during the internship? Who?

Did you interact with other interns? What was the nature of the interactions?

Did your relationship/interactions with your supervisor change over the course of the project? Can you describe the changes for me?
Did you have any difficulties with your work on the project? If yes can you describe what they were for me?

Thinking about your experiences overall, what advice would you give to a future intern?

What do you think is the purpose of the internship programme?

Is there anything you would like to add to what you’ve said that you think is important, but you have not mentioned so far?

What reasons did you have for taking part in the internship?

Did this motivation change as you progressed through the internship?

What did you gain from your involvement in the internship?