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Social influence on students' experiences of transition into postgraduate study

Abstract

Introduction

Students' social relationships play an important role in their experiences of educational transition, with some researchers reporting that postgraduate students often feel a lack of support during their transition. The current study examined how students' social relationships influence their experiences of transition into taught postgraduate study in the Sport and Exercise Sciences.

Method

A mixed methods approach was adopted to explore 12 students' (M age 25 ± 9.54 ; 4 female, 8 male) social relationships and the perceived influence of these relations on educational transition. A personal network analysis was used to structure an interview which was analysed using a thematic content analysis.

Results

Five sources of social influence were identified, including social support, social comparison, gate keeper, accommodation of relationships, and, coping with the network. These themes were evidenced and discussed with reference to participants' network structural features such as tie strength and alter centrality.

Discussion

The combination of both network structure and function makes a novel contribution to literature by highlighting aspects of participants' social network in context to their

experiences of transition. Results are discussed in relation to social network theory and models of influence. Recommendations for coordinators of Masters programmes are also offered relating to the provision, development and maintenance of supportive relationships.

Keywords: Postgraduate transition; personal network; social support; social relationships; education

Introduction

Educational transitions have received much research attention with Askham (2008) suggesting that student's transition into Higher Education (HE) can be likened to entering an 'alien environment'. Researchers have identified that the costs associated with a negative experience of educational transition can be high, including excessive stress, loss of confidence, lowered self-esteem, and ultimately non-completion (e.g. Keller, 2018; Kyndt, Donche, Trigwell, & Lindblom-Ylance, 2017; Porter & Swing, 2006). The transition between undergraduate and postgraduate study may be equally challenging for students. Students report stressors such as having less contact time with lecturers and other students, financial burden, and increased workload as specific to their postgraduate experience (O'Donnell, Tobbell, Lawthom, & Zammit, 2009). Relatively little research has been conducted on the transition from undergraduate into postgraduate study despite in 2016/17 taught postgraduate qualifications accounting for 22% of all qualifications obtained in the UK (HESA, 2018). There are suggestions that this dearth of literature may be attributable to the assumption that little adjustment is required to cope with the demands of the undergraduate-postgraduate transition (Tobbell, O'Donnell, & Zammit, 2008). Unfortunately, this assumption underestimates the challenges of postgraduate study, particularly when a student moves to a new academic institution, relocating away from their established community or re-entering education after several years away (O'Donnell et al., 2009; Tobbell & O'Donnell, 2013a). Indeed, of the postgraduate students surveyed by West (2012) 64% described the transition as "difficult". In Kinash and Crane's (2016) study of Australian postgraduate student experiences, students revealed similar barriers to transition as those commonly reported by first year undergraduates. Despite these reported common barriers to transition, institutions failed to provide specific support to facilitate postgraduates in resolving these, resulting in both student and staff dissatisfaction. Additional research is

required to examine postgraduate transition in order to better understand student experiences and how they can be supported through the process.

Postgraduate transition

Research by O'Donnell, Tobbell and colleagues (O'Donnell et al., 2009; Tobbell & O'Donnell, 2013a, 2013b; Tobbell et al., 2008; Tobbell, O'Donnell, & Zammit, 2010) has sought to address the lack of understanding regarding postgraduate transition. Overall, their research suggests that students' transition into postgraduate study is often complicated, frustrating, and stressful. For example, O'Donnell et al. (2009) examined postgraduate transition using semi-structured interviews with 14 Masters and PhD students and 6 staff members responsible for postgraduate teaching and supervision. It was found that the needs of the students did not match the institutional support made available to them. All student participants expressed difficulty in the "mastery of key skills or academic practices" (p. 31) required for postgraduate study. Students wanted more encouragement and assistance to become the 'active learners' staff expected them to be. In contrast, at an institutional level, the assumption was that postgraduate students were 'skilled learners' and did not require support. Furthermore, it was suggested that the interaction between students and academic teaching staff was of utmost importance and changed from that at undergraduate level. Students discussed how they felt that they were treated more as junior colleagues as opposed to students and that relationships were more collegiate and informal. These findings were extended by Tobbell et al. (2010) using an ethnographic, mixed methods approach (interviews, focus groups, diaries, and observations). Students reported how they felt isolated and lacked support from academic staff in facilitating their transition. This caused trepidation and difficulty in understanding the requirements needed in order to succeed in their studies. Furthermore, students' transitional experiences were heavily influenced by their lives outside

the University and study. Students described struggling to manage time and commitments, and in particular family, “those people who had partners, children and perhaps part-time jobs were particularly time poor” (p. 271).

Overall, it has been highlighted that there is a general lack of understanding and appreciation of the process of student transition into postgraduate study and a necessity for further research into the area (Tobbell & O’Donnell, 2013a, 2013b). It is clear that the demands of the postgraduate transition have not been acknowledged in pedagogic practice. In addition, there is the need to look beyond the ability of students to cope with educational demands and the role of institutional staff in this process but to also consider the wider constraining influences at play on postgraduate students such as home life (Evans, Nguyen, Richardson, & Scott, 2018).

Social influence on transition

Like other educational transitions, postgraduate transition may involve the loss, absence, or adjustment of important social support resources crucial for adjustment and academic success (Evans et al., 2018). Furthermore, the acknowledgment that many postgraduate students experience difficulty managing additional life pressures and commitments confirms the notion that students’ experiences of transition are heavily influenced by their social interaction. In Evans et al.’s (2018) study of the perceptions of international postgraduate students, the development of peer support networks was identified as crucial in the management of the academic demands associated with the transition. Indeed, loneliness and isolation is a common experience of postgraduate students and can have considerable impact on the educational progress and mental health of students (Janta, Lugosi, & Brown, 2014; Panda, 2016). However, merely acknowledging that social relationships have an impact on the transition process falls short of detailing the contribution of specific

social interactions and the meaning students attach to these interactions. A better understanding of how students' experiences are shaped by their social relationships would help inform the implementation of support structures and services postgraduate students have highlighted as lacking (e.g. O'Donnell et al., 2009).

One approach that is suited to examine the social relationships relevant to postgraduate transition is that of personal network analysis. This approach is underpinned by social network theory and views the social relationships an individual has in terms of the people who they know and interact with or 'alters', and the relationships between alters or 'ties' (Borgatti, Everett, & Johnson, 2018). An advantage of this approach over other research designs is that it offers the opportunity to examine the complexity of social relationships. It provides an insight into the structure of students' social relationships, allowing the identification of patterns and structures (e.g. network size, cliques) that might dictate support availability and provision. When combined with qualitative methods, the approach becomes additionally insightful as meaning can be applied to identified patterns and structures to examine the function of these relationships (e.g. supportive, undermining, role models) in context. To date no research has sought to use a personal network approach to examine the role of social relationships in students' experiences of educational transition despite the value of doing so. Other areas of education that have successfully utilised a personal network approach are understanding teachers' relationships (van Waes et al., 2018) and student cheating behaviours (Topirceanu, 2017).

The current study investigated postgraduate students' personal networks and the influence that students perceived their social relationships as having on their experiences of transition into taught Masters postgraduate study. Study aims were (1) to examine what function students perceived that their network had on their transition, (2) to place function in

the context to network structure in relevance to their transition and (3) to identify whether there were any differences in network structure between those who found the transition smooth and those students who did not.

Methods

Research Design

A fully integrated mixed method research design (Domínguez & Hollstein, 2014) was used, in which personal network analysis was combined with semi-structured interviews in both data collection and analysis. This approach was adopted in order to add breadth/depth in the inquiry and to seek triangulation/verification (Gibson, 2016). Variables explored were network structure (size, composition, density, and brokerage) and function in relation to influencing experiences of educational transition. A *post-positivist* paradigm (Creswell, 2014) was adopted in this study. This paradigm recognises that whilst accounts from participants are subjective and represent their own lived 'reality', similarities in accounts are sought in order to attempt to 'make sense' of the phenomena under study.

Participants

From a Higher Education institution based in a city in the south of England, twelve students (4 female, 8 male) volunteered to participate in the study (mean age 25 ± 9.5). Participants were in the first semester of a one-year, fulltime, taught MSc programme, studying a sport and exercise sciences subject. Overall, participants represented 80% of the overall cohort and shared a research methods module together as part of their programme. Ten participants attained their undergraduate qualification at the same university the previous academic year. The other two participants attained an undergraduate qualification at another institution and had taken time out from education (21 and 7 years, respectively). A summary

of participants' demographic information can be seen in Table 1. Participants were recruited through the use of a member of academic support who forwarded a recruitment email to postgraduate students on taught MSc programmes within the Sport and Exercise Sciences Department.

Table 1: Participants' demographic information. Sport and Exercise Sciences courses represented are Sport and Exercise Psychology (Psych), Sport and Exercise Physiology (Physio) and Strength and Conditioning (S and C)

Participant number	Age	Gender	Number of Alters	Mean age of Alters	Percentage of network male	Percentage of network female	Living arrangement	Graduate from same University?	MSc course
P1	23	F	36	30	29%	70%	with students	Yes	Psych
P2	22	F	36	25	30%	69%	with parents	Yes	Physio
P3	23	M	28	33	53%	46%	with parents	Yes	Psych
P4	22	M	45	26	68%	31%	with students	Yes	Psych
P5	24	M	29	35	62%	37%	with parents	Yes	Psych
P6	38	M	10	39	70%	30%	with spouse	Yes	Psych
P7	56	M	9	45	77%	22%	with spouse	No	Psych
P8	24	F	26	31	26%	73%	with parents	No	Physio
P9	22	M	31	31	70%	29%	with parents	Yes	Psych
P10	22	M	21	35	71%	28%	with parents	Yes	S and C
P11	22	M	28	26	64%	35%	on own	Yes	S and C
P12	21	F	18	27	38%	61%	with parents	Yes	Psych

Personal Network Analysis

A personal network analysis was conducted based on the methodology of Hogan, Carrasco, and Wellman (2007). This involved the creation of a *sociogram*, which is a visual depiction of who the participant (*ego*), knew and whether these individuals (*alters*) knew each other. Sociograms were created following a standardised procedure.

Stage 1. Participants were presented with 50 yellow and 50 orange sticky edged paper page markers (size 1cm x 3cm) and asked to write the names of people who they knew and who they would define as either 'very close' (yellow markers) or 'somewhat close' (orange markers). The definition of 'very close' (people with whom you discuss important matters, with whom you regularly keep in touch, or who are there for you when you need help) and 'somewhat close' (people who are more than casual acquaintances but not 'very close') was provided to participants.

Stage 2. With each name, participants were asked to indicate their gender, age, level of education, and role within the network. The level of education was coded 1-3 (1 = no degree, 2 = undergraduate degree, or 3 = postgraduate degree). Alter role was coded A-I (A = immediate family, B = romantic partner, C = other relative, D = neighbour, E = someone you currently work with, F = someone you know online, G = someone from an organisation or club, H = a friend not included above, I = other). Completed sticky notes were compiled on a piece of card.

Stage 3. After participants exhausted their list of alter names, several prompts were provided to encourage participants to remember additional names that may have influenced their experiences of transition. Prompt questions asked were, "*Is there anyone who has been important, influential, supportive, or provided you with something beneficial to you and your transition that you have not already included?*" and "*Is there anyone who has hindered or*

hampered your transition, in that they were not supportive or had a negative influence on your experiences of transition?". Finally, participants were asked to look through the contact list on their smart phone to check that nobody had been omitted. Social network researchers have indicated the importance of the use of multiple name generators and prompts to reduce forgetting and recall bias when collecting network data (Marin, 2004; Marin & Hampton, 2008).

Stage 4. Participants were presented with an A2 sheet of paper marked with five horizontal lines and told that this was a visual representation of their social network and the lines represented perceived closeness to them. In order to limit ambiguity and add some level of standardisation regarding alter placement on the diagram, the horizontal lines were labelled according to the closeness that they represented (immediately close, very close, close, less close, not close). They were then asked to place the named sticky notes on the template according to how close they felt to that person. The notes were placed on the line and grouped so that people who knew each other were in roughly the same proximity.

Stage 5. Participants were then asked to indicate relationships that existed between alters by drawing lines around groups of three or more alters to represent cliques that exist within the network (a bold line signified a strong relationship, whilst a dashed line signified a weaker or contentious relationship). Dyadic relationships were indicated simply by drawing a line (solid or dashed) between the two names (Figure 1). Participants were encouraged to move and adjust the names on their network until they were satisfied that the visual display was an accurate representation of their network.

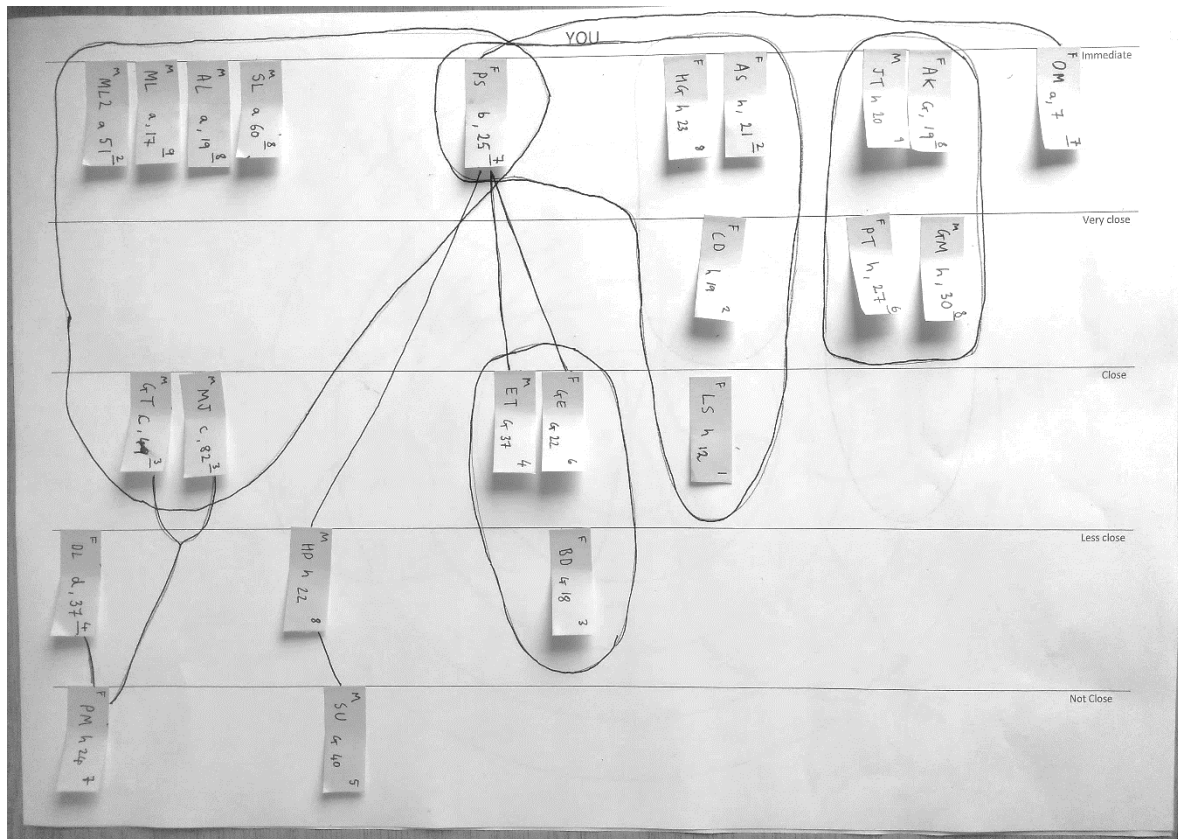


Figure 1: Example completed sociogram (anonymised). The horizontal lines represent emotional closeness. Lines drawn around and between tabs denote relationships between alters. On each tab the first two letters are each alter's initials, the third letter represents their role within the network (a family; b romantic partner; c other family; d neighbours; e work colleague; f someone online; g someone from an organisation or club; h friend; i other), the next number is the alter's age. The letter in the left hand corner illustrates the alter's gender (M, F or O[other]).

Interviews

The sociogram was then used as a visual stimulus to structure an interview which explored how participants perceived that their experiences of transition into Masters level study were influenced by their alters. Participants were asked to consider the sociogram and “take me through your network and explain any influence you feel these people have had on your experiences of transition, this influence could be positive or negative?”. This question was intentionally open in order to suit the exploratory nature of the study. Participants were

finally asked to rate their overall experiences of transition into Masters level study on a scale of 1-10 (1 being smooth and 10 being difficult).

Procedure

Upon receipt of institutional ethical approval, students were recruited and a face-to-face meeting was arranged between the participant and the primary researcher. Participants provided informed consent and then completed a short interviewer led questionnaire which collected basic demographic information, such as age, gender, whether they have moved university or had time out from study, and whether they were studying on a part time or full-time basis. This short questionnaire took less than five minutes to complete and was followed by the generation of the sociogram and interview. After the interview participants were debriefed with a reiteration of the purpose of the study and how the information would be used. The interviews were recorded using an audio recording device and were then transcribed verbatim by the primary researcher. Completion of the sociogram took between 15-45 minutes (average 37 minutes), whilst interviews lasted between 20-47 minutes (average 32 minutes).

Data Analysis

Data analysis followed a three step procedure.

Step one. Sociogram data was entered into personal network analysis software, EgoNet (McCarty, 2003). EgoNet output included a personal network diagram and numeric indices of network structure. The personal network diagrams were analysed visually, whereby the number of cliques, components, and brokerage were assessed (Borgatti et al., 2013; McCarty & Govindaramanujam, 2005). Numeric indices of network structure and

composition (network size, betweenness and degree centrality, and percentage of alters in different roles) were compared between participants.

Step two. Interviews were analysed deductively according to psychological and network theories using thematic analysis (Braun & Clarke, 2006). This involved the primary researcher first becoming immersed in the data by reading and re-reading each interview transcript. The data was then coded with reference to the research question (who provides what with what effect). Themes were then identified in the codes and grouped based on conceptual similarity. These themes were reviewed and a reflective process undertaken whereby themes and codes were then compiled and arranged to create a 'map' of social influence and network function which could be compared visually with personal network diagrams. Themes were defined and named with reference to psychological and network theories.

Step three. Themes of influence from the interview data and structural features revealed from the personal network analysis were merged visually to attempt to understand network function in context with structure. This was intended to provide a more holistic overview of social influence than would otherwise be gained from keeping the findings separate (Domínguez & Hollstein, 2014). Participants' networks were also categorised by the 1-10 transition difficulty rating. Participants who perceived their transition as being smooth (providing a rating of 1-5) were grouped and compared against those who perceived their transition as being difficult (providing a rating 6-10).

In line with the post-positive paradigm adopted within this research, a 'criteriological approach' (Smith & Sparkes, 2009) was taken to establish research quality and rigour. Trustworthiness was improved by utilising a second researcher versed in social network analysis to separately analyse the network data and act as a critical friend challenging the

primary researcher to justify their interpretations and conclusions on the data. In addition, as recommended by Smith and McGannon (2017), this critical friend further prompted the researcher throughout the qualitative analysis process to justify the decisions and interpretations made. For example, the critical friend questioned key decisions during the research process by asking the researcher questions that justified decisions made (e.g. “why are these statements clustered together?”) and sought to explore alternative possibilities (e.g. “could there be any alternative explanations than those offered here?”).

Results

Participants’ personal networks varied considerably in size (ranging from 6 to 45 alters) with the two older participants (39 and 56 years) having the smallest networks (see Table 1). Whilst there was individual variation in network structure (see Figures 2-3) the composition of networks was largely consistent across participants, with similar proportions of alters fulfilling different roles (e.g. family, friends, neighbours). The gender composition of networks was consistent with a 2:3 ratio of same sex as the participant.

Four participants (4, 5, 6, & 10) rated their experiences of transition as relatively smooth (providing a 1-5 rating) whilst the other participants indicated that they felt it was more difficult (providing a 6-10 rating). All students perceived that they had experienced a process of transition into Masters level study and this process was influenced by and led to a change in their social interactions with people within their personal network.

The way in which participants’ experiences of transition were influenced by their social interactions is identified in five themes: social support, social comparison, the role of gatekeepers, accommodation of relationships, and coping with the network in transition (Table 2). It is through these themes that differences between those who rated their experiences as easier or more difficult can be identified.

Table 2: Themes of social influence on postgraduate transition.

Theme	How demonstrated in network function	How demonstrated in network structure	Context of influence (Life or Academic)
Social Support	Received and perceived support. Different forms of support provided a range of network members.	Alter centrality and closeness (proximity)	Life
Social comparison	Compare situation to others to improve self-esteem.	Similarity, network composition	Life and academic
Gate keeper	Lecturers provide introductions to important others.	Weak-ties, bridge	Academic and life
Accommodation of relationships	Difficulty balancing time and social relationships, work/life.	Tie strength	Life
Coping with the network in transition	Keeping separate social spheres is a coping mechanism. Change in network seen as negative.	Brokerage and tie strength	Life and academic

Social support

Social support was a dominant theme influencing participants' experiences of transition. It comprised of both perceived and received support, and, a range of social support types was illustrated, including companionship, emotional, financial, informational, and tangible support.

For participant 7, the oldest participant, returning to education after 21 years, social support was the entirety of influence provided by his network and was regarded as critically important:

“They all provide something slightly different but as a group they are quite powerful because they all provide me with some different piece of the jigsaw if you like. They don't all say the same thing, they all give me little tips and advice and stuff and that in

terms of the transition, coming to do it, those bits were important for me in informing me whether I could do it or not”.

For the other participants the provision of support was not distributed across the whole network and there appeared to be a reversed hierarchy of support provision with a few close, most central alters providing the most frequent and multiple forms of support. Family and romantic partners tended to provide mostly emotional, tangible, and financial support. For example, participant 10 describes how his mother is the vital provider of multiple forms of support:

“My mum she does it all... the list of things she does is quite exhaustive... it’s a bit of a list...Makes my food, does all my washing, I live for free, she insures my car, she buys my car, she taxed my car, she fuels my car, she employs me. She is just very supportive”.

Informational support, in contrast, was sought from alters within the academic setting, from academic staff to whom participants were less close. Course mates were important sources of companionship support, as participant 12 outlines:

“X is on my Masters [programme] as well so she makes it easier like we go through our work together and that is the only real influence. Going through something we find hard or that sort of thing so”.

Participant 12’s quote above also highlights that social support was discussed in terms of reciprocity. Emotional and companionship forms of support were frequently referred to as being reciprocal and participants placed value on the notion that they did not only receive support but also were providers.

The usefulness or efficacy of perceived support was evaluated by participants based on a rating of an alter's understanding of an issue. For example, participant 8 describes how a former lecturer's support was perceived to be efficacious:

“They know what it involves so they understand so when you say that it is a lot of reading they know how much reading and like if there is something that I can't do, I know someone who could give me the answer if I ask them.”

This contrasts with the support provided by parents which was sometimes viewed as less efficacious based on parents' perceived lack of understanding of the academic transition process. Participants indicated that parents did not understand because they had not studied at Masters level themselves and so did not appreciate the stressors experienced by their children. Participant 1 outlines that whilst her parents provided lots of support it was not always helpful:

“Mum and Dad have been incredibly, really supportive and very positive about the whole thing because my brother didn't go, none of them went to Uni so I'm the first person of my family to go to Uni... So where they haven't had to do that, they don't understand, they have stressors in their job but they don't understand the academic stress on me or anything like that.”

Structurally, social support was most often provided by close alters who were well-connected within the network (having high degree centrality) and able to mobilise different forms of support.

Social comparison

A second theme of social influence which was discussed by all participants was the role of social comparison. Participants used comparison to their alters as a method of

reinforcing/heightening their self-esteem. For example, participant 1 reports how she compares herself to her undergraduate friend who is in full time employment:

“I can see how miserable he is and that makes me feel better (laughs). He doesn’t seem happy with what he is doing and I can tell that so that kind of makes me feel like yeah I made a good choice”.

Other participants similarly indicated that they compared their situations to that of their postgraduate, undergraduate, school and childhood friends. Structurally, the alters who were used for comparison are predominantly those labelled ‘friends not included above’, were of a similar age to participants, and not proximally close (Figure 2).

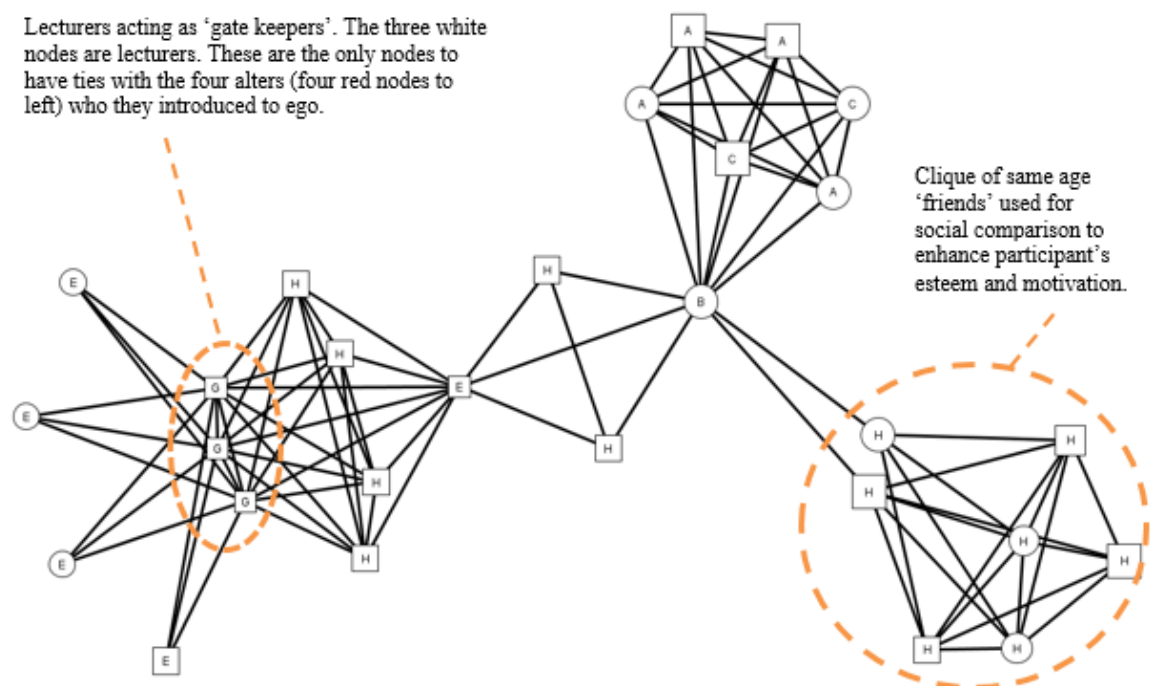


Figure 2: P8’s network with two features (gatekeeper and homophilous clique) identified and explained. Node shape represents alter gender (circle-female, square-male), node labels illustrate the role that alters have within the network (A-immediate family, B-romantic partner, C-other relative, D-neighbour, E-work colleague, F-someone online, G-someone from organisation or club, H-friend). Node size illustrates perceived emotional closeness to ego (larger nodes are closer than smaller nodes).

The role of gate keepers

Lecturers, past and present, were included in nine participants' networks (participants 1, 3, 4, 5, 8, 9, 10, 11, & 12) and occupied a distal position in terms of closeness. Despite not being described as 'close' to participants, lecturers were perceived as playing an important gate keeping role, as participant 9 outlines:

“I went to X [lecturer] saying ‘I want to quit’ and she put me in contact with Y [counsellor] who I then had meetings with and he just helped me realise, talking to him about everything was just making me a lot happier.”

For participants, their lecturer introducing them to people with whom they would not otherwise have any contact had a very important impact on their experiences of transition. Sometimes the people to whom participants were introduced by their lecturers appeared as alters within participants' networks and could be identified easily in the structure of networks as relatively isolated alters or cliques in the network diagrams, with ties with the gatekeepers (see Figure 2).

Accommodation of relationships

Participants who described their experiences of transition as more difficult described how their experiences of transition were influenced by a difficulty in managing relationships and striking a work/life balance. For example, participant 2 explains how she struggled to manage a relationship with a friend, *“I wanted to be by myself and alone...so that I could focus on my work because I was finding it quite difficult juggling different roles and doing different things”*. Similarly, participant 8 stated, *“We were meant to meet up in reading week [mid semester break] but then we both realised that we both actually didn't have any time to meet up”*. The effect of accommodating relationships was feelings of guilt about not being a

‘good friend’ but workload was most often prioritised over social commitments, as illustrated by participant 1, *“I’m trying to be a good friend in a way but I don’t want to affect my work and stuff”*. Participants who rated their overall experiences of transition as easier did not indicate the accommodation of relationships as an influence. From a structural perspective, the alters with whom participants felt unable to maintain relationships, tended to be rated as less close and part of a clique bounded within a context unrelated to postgraduate study, such as old school or university friends.

Coping with the network in transition

All participants discussed how their network had recently changed and how they felt influenced by this change. For participants who rated their experiences of transition as difficult, the change in their network revolved around the absence of peers from undergraduate study and the influence this had on their ability to adjust to the change. For example, for participant 12 the absence of university friends impacted on her motivation to study and succeed:

“These three old housemates from Uni, they don’t have any influence over me now, I hardly see them... I don’t get time to speak to them that they much. It is hard going from undergraduate when everyone is there and then just trying to stay motivated to come in by yourself”.

Similarly, participant 9’s experiences of network change and specifically the absence of previously close alters were challenging and caused him to consider dropping out of the Masters programme:

“...turning up and then not having, not having the close friendships that you had before here. It was almost like starting again so it was kind of like being at a new Uni because

there was no one really. I knew people but not like friends. And it was just a bit weird; it was almost like starting a new course, where you are completely new”.

These two examples demonstrate that the absence of regular contact with close alters from participants’ networks was felt to be negative and a source of stress. For participant 2, the discussion of how a close friend was going to be shortly leaving her network was particularly emotional, *“I’m going to cry because she is leaving for six months and I don’t know what I am going to do”.*

In contrast, the influence of network change was different for participants who rated their experiences of education transition as smooth. These participants acknowledged that whilst their networks had undergone change, they were still able to maintain contact with many alters who were important before the transition, as participant 6 outlines:

“It made quite a big difference having now come back because that same social group is there. We don’t see each other much and we have different sessions on but we have the odd cross over in the cafeteria... but yeah it’s just nice to have those familiar faces”.

Coping with the network in transition as a theme was structurally identifiable in the shape of participants’ networks, with participants 1, 2, 4, 5, 8, 10, 11, and 12 having multiple components or ‘social worlds’ in their networks (see Figure 3). Figure 3 demonstrates how components are clearly recognisable in participants’ network diagrams, as five components can be identified labelled 1-5. Participants discussed that the management of these separate worlds helped them cope with the stressors associated with transition. As participant 6 explains:

“It’s almost when I go home I meet up and go for a couple of drinks and go for a beer and that’s nice because it’s [pause], you can get away from worrying about Uni life and that stuff so that’s nice.”

Similarly participant 8 explains:

“To me they are an outlet that you can go and speak to and they are not ‘let’s talk about Uni work’ it’s more like talking about, about mundane things and that is quite nice.”

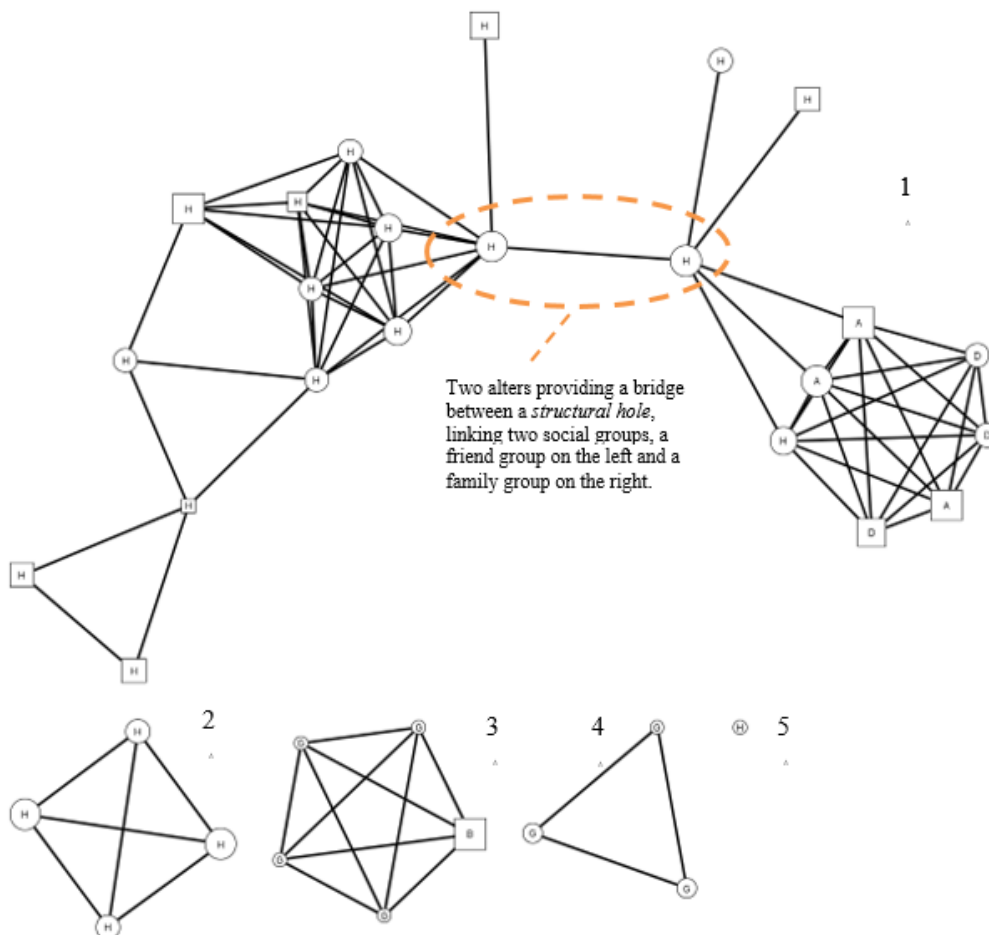


Figure 3: P10’s network, five ‘separate worlds’ are identified as 1, 2, 3, 4, and 5. An example of alters occupying a structural hole are also identified. Node shape represents alter gender (circle-female, square-male), node labels illustrate the role that alters have within the network (A-immediate family, B-romantic partner, C-other relative, D-neighbour, E-work colleague, F-someone online, G-someone from organisation or club, H-friend). Node size illustrates perceived emotional closeness to ego (larger nodes are closer than smaller nodes).

Often participants were unable to keep their social worlds completely separate and alters sometimes bridged the gap between worlds as can be identified in Figure 3. These alters were well connected and were frequently romantic partners. The implication of the presence of these ‘bridges’ is that these alters hold a position of power within the network, sharing many of participants’ social interactions. Only participants 10 and 12 were able to maintain separate social worlds with no bridging alters. These participants reported this as positive as they were able to seek the advice and support from different sources/worlds in the knowledge that these worlds do not overlap (Figure 3).

Overall, these themes were consistent across participants regardless of gender or degree choice. Factors such as age and whether participants were continuing (at the same institution as their undergraduate degree) or external students appeared important influences on the way in which social influence was experienced. For example, the two older students had much smaller networks and for participant 7, the influence of the network was entirely about the provision of social support. However, further details regarding the extent of the influence of these factors, such as whether they made the transition smoother or more difficult, are unfortunately not apparent based on the range and diversity of the sample.

Discussion

The current study set out to (1) examine what functional influence students perceived that their network had on their transition; (2) place perceived influence in the context to network structure; (3) identify whether there were any differences in network structure between those who found the transition smoother and those students who did not. To achieve these aims, a mixed methods design using personal network analysis and interviews was employed. The results illustrated that all students identified with the concept of educational

transition but their experiences varied. An array of social influences were identified as important in shaping students' experiences of transition; these influences were organised into five themes. Not all social relationships were equally influential or positive and closeness did not determine any particular form of influence.

Participants pointed out that the transition process was twofold and discussed their experiences of transition *from* undergraduate study in addition to their transition *to* postgraduate study. This illustrates the necessity to understand both the world in which students are entering as well as the world they are leaving behind. This resembles graduate transition research which has detailed the transition from the accustomed and known role of a student to the relatively less known world of a graduate (e.g. Cassidy & Wright, 2008; Duchscher, 2009; Romyn et al., 2009). Duchscher (2009) coined the term 'transition shock' to describe the experiences that newly graduated nurses encounter moving into employment. There are similarities between the issues identified by the postgraduate students in the current study and those of the graduate nurses, namely, the loss of important relationships and changing social structures (Clipper & Cherry, 2015; Duchscher & Windey, 2018). Remaining within education, as opposed to transitioning into professional practice, did not mitigate the experience of transition shock. The learning environment, which during undergraduate study had become familiar and provided comfort and security, was now different and challenging. In the context of educational transition literature, the current findings regarding how social relationships were perceived as influential, make an important contribution by confirming and extending current understanding of this critical process of transition. Specifically, results highlight that students entering postgraduate education should be made aware of the transition that they are likely to experience. This could involve highlighting how Masters level study is different from undergraduate, such as how relationships with academic staff will change or that their contact with many network members will diminish.

The central theme of social support is very much in accordance with social support theory (e.g. Lakey & Cohen, 2000; Wills & Shinar, 2004) and previous educational transition research (e.g. Benner, Boyle, & Bakhtiari, 2017; Gawrilow, Riccio, Schmid, Stadler, & Snyder, 2016; Martínez, Aricak, Graves, Peters-Myszak, & Nellis, 2011). The perception and receipt of multiple types of support (emotional, financial, tangible, informational, and companionship) influenced students' ability to cope with stressors associated during transition and is congruent with the stress buffering concept of social support (Cohen & McKay, 1984). Students were vocal in articulating the importance of lecturers in providing highly specific, informational support as well as acting as gate keepers to other support providers. This finding contrasted with those of previous literature which had indicated that students feel they do not receive the support required from the academic staff (e.g. O'Donnell et al., 2009).

That academic staff were viewed as important sources of informational support is unsurprising based on their professional role and experience. However, the depiction of academics as gate keepers by students, who attached value to the ability of staff to extend students' networks by making introductions, extends our understanding of the support staff provide. The notion of academics being gate keepers is in line with the social network concept of *brokerage* (Gould & Fernandez, 1989). According to Prell (2012), a gatekeeper brokers a route of communication between individuals who would otherwise be unconnected to each other. As such gatekeepers hold a position of power within the network deciding whether or not to make introductions or help maintain relationships. Furthermore, academics were most often the weakest connection (less close) in students' networks yet they were cited as having multiple forms of influence over students' experiences of transition. This finding serves to demonstrate the network concept of the strength of weak ties (Granovetter, 1973).

A weak tie's strength is their access to new information and resources, providing a potential connection to different social structures and resources beyond the ego's natural network.

As stated above, participants judged support to be effective based on characteristics of the provider, such as their knowledge of postgraduate study, that is, parents and friends who did not have a postgraduate qualification were perceived as less effective informational support providers. This concept is absent in the educational transition research but has been described in the within-career transition experience of sport (Pummell, Harwood, & Lavalley, 2008).

The notion that a disparity between received and perceived support (such as emotional support from parents) links with the support matching hypothesis (Cohen & McKay, 1984).

The efficacy of supportive actions is dictated by how well the assistance matches the demands of the stressor (Lakey & Cohen, 2000). Therefore, when attempting to manage the challenges of postgraduate transition, informational or companionship support offered by parents or friends was perceived as ineffective as it did not match students' specific needs.

The implications of this are that students' network support resources could be enhanced by including alters with particular attributes such as postgraduate qualifications to afford more upward comparison role models (Festinger, 1954). Future research is required to investigate the impact of network manipulation on perceptions of social support effectiveness. Such research would provide evidence regarding what support is effective from whom and contribute to the development of more comprehensive social support theory (Uchino, 2004).

Social comparison was found to be an important social influence on the students' experiences of transition. Participants' emphasis on the influence of comparison to their same age (homophilous) peers as a means of improving their self-esteem and motivation aligns with Festinger's (1954) social comparison theory. Festinger argued that making *downward comparisons* to similar others who are perceived to be less fortunate may have ego-enhancing

effects (Vogel, Rose, Roberts, & Eckles, 2014). This can be clearly seen in participant one's view of their less fortunate undergraduate friend. By contrast, Festinger stated that *upward comparisons* provide motivation to succeed and facilitate achievement striving behaviour. Relatively few upward comparisons were made by participants, which may reflect an absence of network members who could provide such comparisons. In the postgraduate setting an upward comparison might be made with those who have studied and graduated from the same or similar course. In the context of Marsh and Parker's (1984) big-fish-little-pond effect, there is no upward local frame of reference for postgraduate students on which to base their self-concepts. Based on Marsh and colleagues (Marsh, Trautwein, Ludtke, Köller, & Baumert, 2005; Marsh, Trautwein, Ludtke, Baumert, & Köller, 2007) recommendations regarding the avoidance of being a big fish for academic achievement and self-concept, undergraduate students may benefit from having contact with students in the years above. However, given that postgraduate taught programmes are typically one year and involve small cohorts, the potential benefits afforded by upward comparison are limited. A lack of alters with which to make an upward comparison may have negative consequences in leading to uncertainty amongst students in their ability to succeed in their academic endeavours (Huguet, Dumas, Monteil, & Genestoux, 2001).

The difficulty for students to accommodate, manage and cope with their network during this transition indicates that the move from undergraduate to postgraduate study was a period of uncertainty for students, impacting on their personal and academic lives. This overflow of the transition into their non-student life is reminiscent of the findings of Tobbell et al. (2010) that life commitments and everyday relationships were important influences on students' transition. Interestingly, a difficulty accommodating relationships was only cited by students who rated their experiences of transition as more difficult. This reinforces the story told by participants that relationship accommodation was a negative social influence. The

finding that it was relationships with 'less close' alters that were most often perceived as challenging to accommodate may be understood with reference to social exchange theory (Emerson, 1976) and social capital (Bourdieu, 1980). Social exchange theory proposes that interpersonal relationships are appraised in terms of the costs versus benefits of maintaining a relationship. From this perspective, students' difficulty accommodating relationships represents their struggle to divide their limited cognitive and time resources between academic workload and social connections to alters.

Students discussed how the management of networks extended beyond the accommodation of relationships, and concerned attempting to manage different components or social worlds. The notion of cliques and components is a fundamental concept within the social network literature (Borgatti et al., 2013; Wasserman, 1994). In particular, Burt's (2004) social network theory of '*structural holes*' may help explain some participants' experiences managing their network. For participants, having distinct, unconnected, social structures or components was associated with their ability to effectively cope with the demands of the transition. Burt's (2004) concept of structural holes refers to how certain network structures can give some alters strategic advantage over others. With reference to Burt's concepts, in some participants' networks, alters that linked together cliques and components were occupying a structural hole and reducing ego's sense of control over their network. Ego is required to be consistent with information across separate components. Conversely, these connecting alters may reduce the burden of maintaining separate components for ego by providing the opportunity to share and mobilise information with greater ease. Additional research should investigate the specific impact these particular alters have on students' experiences of transition. This would inform our understanding of whether having a more connected or disparate network is more or less advantageous to students' experience of transition.

Findings indicated that students do experience a within-education transition from undergraduate to Masters level study, and that this transition may for some, be stressful. It is recommended that students entering a postgraduate taught programme are counselled regarding educational transition and how it may be influenced by their various social relationships. Through a process of transition counselling and mentoring, students may be able to better prepare for postgraduate study, encounter fewer difficulties during their studies and be less at risk of poor attainment or withdrawal. From an academic perspective, it is noteworthy that students placed value on the gate keeping role of staff. Students aspired to develop and extend their network by making ties within and beyond the academic community that may support future transition from student to professional, be it academic (doctoral study) or applied (professional practice) work. Staff awareness of their potential role in students' networks is important as they may be able to enhance student experiences of transition with relative ease through the process of student induction at the beginning of the course or through a personal tutor system. Literature has indicated the importance of personal support from tutors for students' engagement in their studies (Braine & Parnell, 2011).

Other aspects of educational transition should receive attention, such as the impact of moving institutions, where the influence of social interactions is likely to be different and perhaps even more important. Indeed, educational transition for international students has been highlighted as being further compounded by the move to the host country. Students often have to negotiate challenges of study and life in a language in which they are not fluent (Kettle, 2017) and when they are detached from family support systems (Vardaman & Mastel-Smith, 2016). Understanding how social relationships may facilitate the transition process for these students would be particularly valuable. In addition, research should be directed at understanding the impact of socioeconomic factors on postgraduate experiences of transition, such as employment status and family income. Reflecting the rising costs of

Higher Education in the UK, students in the current study were reliant on their parents providing financial support and accommodation. It is likely that the experiences of students who have to work alongside their studies to manage living costs would be different from those who do not. Additional research that provides an insight into the impact of socio-economic factors on students' experiences on transition would extend our understanding to those students who may experience the greatest challenges, that is, those of low socioeconomic status.

Limitations

As with any study, there are limitations. This study focused on the experiences of Sport and Exercise Sciences students and owing to their interest in sport and exercise it is possible that these students are more likely to be involved with sport. As sport involvement is associated with the development and maintenance of social relationships (e.g. McDonough, Ullrich-French, & McDavid, 2018), it is probable that sport involvement may foster structures within the network (e.g. homophilous cliques) that are inherently supportive during transition. In addition, these students may have fundamentally different networks and experiences of transition from students on other programmes of study thereby limiting the extent to which the findings from this study can be applied. The proposition that sport and exercise participation may enhance network structure during periods of transition should be examined further across students studying different subjects to understand the potential of sport participation as a means of supporting the process. The current study attempted to achieve breadth and depth via the use of mixed methods, carrying out network analysis and interviews. Although steps were taken to enhance the trustworthiness of the analysis, the fundamentally subjective data analysis process used in the study means that our interpretation of the data may not concur with those of others who could draw alternate explanations and

conclusions. Despite the study's analysis of the network data and the interview data being separately guided by the recommendations of others (e.g. Braun & Clarke, 2006) there was very little formal guidance regarding the combination of the two different forms of data. Future research is required that explores and documents different methods for the combination of data to provide researchers with tools for best practice when carrying out mixed methods research.

The use of a social network approach to data collection has highlighted the dynamic and interdependent nature of socialisation. Postgraduate transition appears to be a complex process of socialisation. There is a need to consider the dynamic process of transition in terms of the transition from their previous lives to that of a postgraduate student. Postgraduate applicants and academics may underestimate the challenges that will be faced during this time and in particular for those students who move directly from undergraduate to postgraduate study who may not have anticipated the multitude of challenges associated with their social relationships that they will encounter. Academic, admission and support service staff perhaps need to consider how transition can be eased or scaffolded for postgraduate students and how these are distinctive from the transition experienced by undergraduate entrants.

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