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Developing a Supportive Community of Practice: A Doctoral Case Study

Jan Jones

University of Chester, UK

 ORCID: <https://orcid.org/0009-0007-3396-3806>

Mervyn Ward

University of Chester, UK

 ORCID: <https://orcid.org/0009-0009-0100-4402>

Patrycjusz Szubryt

University of Chester, UK

 ORCID: <https://orcid.org/0009-0007-3218-2952>

Ute Franzen-Waschke

University of Chester, UK

 ORCID: <https://orcid.org/0000-0002-2127-1534>

Lisa Rowe

University of Chester, UK

 ORCID: <https://orcid.org/0000-0003-0817-3398>

Abstract

This paper employs a qualitative case study to suggest how the research journey of doctoral students can be improved in educational institutions by encouraging the formation of small and informal Communities of Practice (CoP). It examines themes emerging from the feelings and opinions of four part-time professional doctorate students about their study experience and participation in their emergent CoP. A peer group developed where the students share their experience, expertise, insight, and knowledge in a caring and supportive, but informal, forum. CoP could become an effective tool to aid retention, identity development and wellbeing of postgraduate level students, factors which have been previously identified as key areas of risk. An autoethnographic approach was used to review the feelings, perceptions, and opinions of the four case study group members about their experiences of the informal CoP to date. Thematic analysis of transcripts and WhatsApp communications was used to reveal the

perceived common benefits and gains from participation in the informal CoP such as joy, safe spaces, and identity development, aligning members experiences to a CoP lifecycle. The study found small group formation at doctoral programme induction, and encouragement for students to organise their own regular study days using of social channels, may impact overall success. Application and adaptation of this doctoral CoP model could form the basis for future research and a model for academic institutions to suggest to new and existing students.

Keywords: community of practice, lifecycle, professional doctoral students, support, identity

1. Introduction

In February 2021, a group of part-time professional doctoral students met online for the first time as part of a research methodology module in preparation for their individual doctoral journeys. A planned hybrid model of physical attendance where possible, and virtual where necessary, fell subordinate to cautious controls on campus during Covid, shifting the programme online. Pre-assigned breakout groups on the course facilitated deeper student connections leading to the formation of a small study network of four, henceforth denoted as the ‘informal CoP’ to differentiate it from the formally pre-assigned programme group. By the end of the methodology module, these students were an identifiable group (Zander, 1982) who, on progression to the research phase, were joined by two others, consistent with Lave and Wenger’s (1991) initial description of a CoP as a grouping which engages on a regular basis and shares an interest or passion. This informal CoP has contributed to identity and researcher development as their emergent CoP supports and encourages individuals by developing co-working skills, resilience, and knowledge.

The taught module online delivery used MS Teams, but the informal CoP activated WhatsApp for social interaction. Geographically, most of the informal CoP and their supervisor live in northwest England but one member is based in Germany. The group meets online, approximately every 4-6 weeks for an informal study day, exchanging greetings in the morning, having a brief academic and social discussion for 20-30 minutes, working for an agreed time, and then meeting again later or saying goodbye, depending on individual commitments. The time between online days is additionally punctuated by WhatsApp messages and emails.

Whilst sector resources, such as Vitae’s (2011) researcher development framework provide a clear structure for researcher competencies, each doctoral student’s development takes place within an exceptionally unique set of conditions, influenced by their cultural and professional backgrounds, work experience, role seniority, life stage, and family commitments. University faculties often anticipate completion of part-time professional doctorates within shorter timescales than that extended to part-time PhDs, paying limited regard to professional doctorate students’ extant commitments, and creating a compressed and highly challenging life/study/work balance (Kot & Hendel, 2012).

Concurrently, contemporary modes of delivery have evolved from traditional face-to-face workshops, group discussions and supervision to largely digital synchronous and asynchronous methods, increasing opportunities for cohort diversity and access to a global network of professionals. Sophisticated levels of communication across programmes and institutions may facilitate larger interdisciplinary researcher CoP, adding further developmental opportunities, yet perhaps inadvertently limiting informal and social small group dialogue (Melián et al., 2023). Attempts to build upon the notion of belonging have naturally resulted in an increased

frequency and range of informational exchange, facilitated by an array of different asynchronous and synchronous communication platforms and channels. Extensive use of virtual media engagement does however risk technostress and zoom fatigue (Silard et al., 2023; Upadhyaya & Vrinda, 2021). The extant literature remains unclear as to the value of digital CoP for professional part-time doctoral students, particularly when juxtaposed with ever more intense levels of workplace and social digital communication. Whilst there is some collaborative autoethnographic research examining the real-world experiences of PhD students (Carson & Nicklasson, 2023; Vacek et al., 2021), there appears to be very little research exploring the creation and evolution of a digital CoP (Subedi et al., 2022) involving professional part-time doctoral students within a UK Business School.

Together, these tensions present a unique set of circumstances for students pursuing a professional part-time doctorate, particularly in terms of making sustainable progress and feeling a sense of belonging within a community of like-minded students who are on a similar journey (Lee, 2020; Studebaker & Curtis, 2021; Subedi et al., 2022). The membership of small CoP may provide the additional support mechanisms needed for new researchers who are developing their researcher identities whilst also providing a leveller in confidence and self-belief regardless of professional levels, roles, or sectors. Yet, whilst doctoral-level students are expected to be driven, autonomous learners, meaning that self-managed CoP are customary, separation from the wider cohort may inadvertently create potential issues around belonging, identity and learning across practice (Probst & Borzillo, 2008; Wenger, 1999).

To address this lacuna, this paper aims to advance our understanding of the effectiveness of a small and informal digital CoP through a case study approach (Yin, 2017). The study is set within a small UK Business School in the northwest of England and explores the experiences of four participants as they navigate a professional doctorate. The students and their supervisor are the authors. The study aims to offer a perspective on how other doctoral students could easily form their own informal CoP for mutual support and encourage doctoral programme leaders to consider similar initiatives.

2. Literature Review

2.1. Communities of Practice

The term CoP was initially described as a system of relationships between people, activities, and the world; developing over time, and in relation to other tangential and overlapping communities of practice (Lave & Wenger, 1991), where learning between members helps both professionally and personally. CoP are informal groups based on mutual interest underpinned by connections between participants. The perception of CoP developed further and by 2015 Wenger-Trayner and Wenger-Trayner (2015) had moved the description of CoP onto a circle of individuals connected by a shared passion, interest, and desire to improve in their respective fields by working together on a regular basis.

Formal and informal CoP rarely attract specific focus but can be identified by their members and actions. CoP evolve language, documents, symbols, tools, images, roles, sensitivities, and expectations, reflecting the characteristics of culture (Deal & Kennedy, 1982; Schein, 1997), and offer a clear context for participants to work out direction, strategy and priorities. Doctoral study can be a lonely journey and events like the COVID-19 lockdowns can jeopardise students' access to a community of peers which could enhance their learning environment (Lahenius, 2012).

Subedi et al. (2022) and Zheng et al. (2023) confirm the value of CoP to participants who collaborate through informal communication and networks, sharing experience, knowledge, and expertise, to create innovative solutions. Technology may facilitate better participation in CoP and communities can expand with technological development (Zanotti & Magallanes, 2015). Lee et al. (2015) describe CoP as a possible mechanism for improving knowledge sharing and whilst web technology may have not increased the intensity of participation, they found evidence of individual benefit from the ease of virtual communication. However, the overlaying of multiple communication channels requires careful implementation to reduce the risk of technostress (Silard et al., 2023; Upadhyaya & Vrinda, 2021).

2.2. CoP Lifecycles

Products move through identifiable (*lifecycle*) stages of introduction, growth, maturity, and decline (Levitt, 1965) and researchers have aligned CoP with the lifecycle. Zanotti and Magallanes (2015) interpret CoP as specialists from different fields sharing resources, experience, and knowledge, against three notions of lifecycle: interaction platforms, participants, and group goals. In considering continued action beyond the initial CoP, Pohjola and Puusa (2016) stress that group dynamics are pertinent in deciding whether to maintain input (*continue CoP activities and participation*), change (*differentiate activity and membership*), or disassemble (*dispersal, disposal, stand down and withdraw from*) the CoP.

In questioning how CoP can cultivate innovation, Zheng et al. (2023) consider the dynamic lifecycle of CoPs to link various industry sectors which may subsequently becoming self-governing and actively influence change. The CoP, rooted in shared professional experience and expertise using informal communication and collaboration, progressed through a project lifecycle from formation, expansion, transformation (*as different projects emerged*), and renewal, interacting with the wider community to disseminate knowledge through conferences and publication (Zheng et al., 2023).

2.3. Transforming Identities

Identities evolve when individuals are exposed to deep, new learning over time, typified by the multi-faceted opportunities within doctoral-level study, leading to a shift in long-held personal and professional beliefs and understanding. Identities are formed by environments, preferences, belief systems, heritage, subject disciplines and learning contexts, further shaped by interactions with others (Seyri & Rezazee, 2022). Context may affect the self-perception of identity and that of others, and learning and identity are inextricably linked (Baker & Lattuca, 2010). Engaging in academic learning alters self-perceptions (Packer & Giocochea, 2000) and taking an active role in a CoP engenders a sense of belonging (Botelho de Magalhães et al., 2019); this is particularly evident in the regular and active participants of discussion groups (Seyri & Rezazee, 2022).

Seyri and Rezazee (2022) suggest that the online identities of doctoral students remain elusive, noting the effect of the contextual shift from face-to-face to online study during Covid-19 and its impact on individual identity development at a time of potentially great individual transformation. Whilst there is some collaborative autoethnographic research examining the real-world experiences of PhD students (Carson & Nicklasson, 2023; Vacek et al., 2021), virtual professional part-time doctoral identity is largely unexplored and there is little published on student university identity (SUI). Here, consideration should be given to linguistic

backgrounds, cultural experiences, the barriers that online work may present (Salimi & Banitalebi, 2023; Seyri & Rezaee, 2022), how individuals interact and engage, perceptions of how individuals are represented, and their place in the community (Subrahmanyam & Šmahel, 2011). Virtual learning environments can be challenging, affecting confidence, performance, motivation, and rapport building when differentiating between classroom and social identities (Salimi & Banitalebi, 2023).

2.3. Learning in a supportive environment

The benefits of peer-assisted learning and mentoring (PALM) were known pre-Covid-19, supporting students with transition to university, gaining more popularity post-pandemic in enhancing student wellbeing (Meletiadou, 2022). Research into Learning Communities' (LCs), altruistic knowledge-sharing groups within an interactive and collaborative environment, evidences their success in facilitating goal achievement (Brouwer et al., 2022), alongside relationship-building amongst students, where knowledge is co-created or socially constructed (Vygotsky & Cole, 1978; Subedi et al., 2022). Additionally, the self-directed learning model by Boyatzis (2001), with trusting relationships at its heart, encourages team members on their journey and can be transferred from the workplace to academia (Goleman, et al., 2002; Zamnah & Ruswana, 2019).

Social Baseline Theory (SBT) suggests that any burden is less taxing and risky when not experienced alone (Beckes & Sbarra, 2022). SBT has often been associated with encounters in the real world, in which people can 'be in touch' in a literal way. Beckes and Coan (2011) acknowledge that relationships increase health and wellbeing, and this informal CoP shows that a sense of feeling better can also be experienced at a distance.

3. Methodology

3.1. Research Design

An autoethnographic, qualitative case study (Yin, 2017) was used to review the feelings, perceptions, and opinions of the four members of an informal CoP about their experiences of their CoP to date (Ball, 1993; Stokes, 2011). The participants are also the authors alongside their supervisor. An interpretivist philosophy was adopted, recognising this informal CoP members' perception of events, interactions, and relationships (Saunders et al., 2023). Group epistemology includes knowledge brought to the informal CoP, shared, interpreted, and new insights created, and corroborated by members' memories and records. In terms of ontology, the group has substance and reality, vouched for by its membership, activities, products, and sustainability. Relativism was considered an appropriate stance as meanings, interpreted through discourse, both verbal and written, were shared and respected (Stokes, 2011; Easterby-Smith et al., 2021). In addition to individual goals, CoP members shared a common interest and shared values in progressing their research to thesis, completion, and achievement.

3.2. Data Collection

Data was taken from transcripts of two existing group discussion videos prepared separately by the informal CoP members for a symposium presentation in summer 2023. This secondary use of data was supplemented by comments from the informal CoP's WhatsApp account since its inception in February 2021. No further data collection was pursued. As the research aims to explore the real-time, organic development of a CoP among doctoral students, which is

inherently informal and emergent, the data collection through group discussions is reflective of the natural interactions (Anderson & McCormack, 2021) within this informal CoP, aligning with the study’s interpretivist and autoethnographic approach.

TABLE 1: INFORMAL CoP PARTICIPANTS – AS ENROLLED 2021

Student	Occupation	Degree	Doctoral Research
A	University Senior Lecturer	DProf	Transfer of Skills from informal settings into the workplace
B	Executive Team Coach	DProf	Supporting Leaders in Creating Workplace Wellbeing
C	AI Strategy Director	DBA	Skills Shift in Business Process Managers role during Artificial Intelligence introduction in organisation
D	Chair of Further Education College	DProf	Risk of Damage to College Reputation from Merger
E	Doctoral supervisor	Already holds DBA	n/a

Source: Own compilation

3.3. Data Analysis

Basic manual thematic analysis was used to discern key elements of group practice with supporting quotations/words used to underpin and evidence each (Bell et al., 2019; Braun & Clarke, 2006). This type of analysis is appropriate as it is based on individual realities and all group members contributed to and analysed both data sets independently before cross-checking and reducing/re-ordering themes, understanding and reaching consensus as a team. Coding and quantitative analysis was not pursued due to data size. Moreover, this method allowed the researchers to draw on their own experiences and emotions, which is a valid and recognised practice in qualitative research (Allen, 2015). Themes recognised reflect the core elements of CoP theory such as mutual engagement, joint enterprise and shared repertoire (Lave & Wenger, 1991).

3.4. Rigour, Validity, Reliability & Reflexivity.

Bias inevitably exists in this case study as the authors are writing about themselves, limiting claims of objectivity. The approach employed Lincoln and Guba’s (1985) three considerations of validity: it is credible as the participants are also the researchers, it may be transferred to other CoP, and dependable as could be used for cross-sectional or longitudinal studies. In terms of reliability, whilst this type of study may be replicated amongst other informal doctoral groups, the internal and external elements such as researchers, context and timing will differ (Saunders et al., 2023) and consequently, the results may also vary. Acknowledgement of privileged access (Carlson, 2024) to inside knowledge (Yanto & Pandin, 2023) through CoP participation, and reflexivity is essential, as researchers’ own experiences, values and views are the basis of this study (Stokes & Wall, 2017). These researchers conducted the research by examining the impact of their informal CoP (Meyer & Dykes, 2020). Reflexivity in this research has been incorporated through researchers’ involvement in the CoP and influenced their interpretation of the data which is crucial in qualitative research (Finlay, 2021).

3.5. Ethics

The University provided ethical approval. All participants are the authors of this paper and confirmed their approval to use of their data. Anonymity and privacy are protected with participants referred to by letter.

3.6. Limitations

The scale of research and autoethnographic approach inevitably shapes the findings. The goal of the study was not to achieve generalisability to a larger population but rather consideration of transferability of the findings to similar contexts. Furthermore, the findings are intended to inform future research rather than provide definitive conclusions.

4. Findings

4.1. Themes from the Transcriptions and WhatsApp Messages

The Fourteen basic recurring themes identified from the video transcripts and WhatsApp messages are presented in Table 2.

TABLE 2. EMERGENT THEMES FROM VIDEO TRANSCRIPTIONS AND WHATSAPP MESSAGES

Theme Identified	Theme Description	Theme in a Dialogue
Psychological Safety and Team Dynamics	Emphasis on feeling welcome and supported.	"It's a very safe environment for me to pitch some of my ideas." "I'm glad I'm on this journey with you." "Thanks guys, today was really useful and gave me the motivation I needed to get working on it."
Interpersonal Chemistry	A crucial factor in the group's cohesion and success.	"We get on fantastically well." "You are such a brilliant group of people to be on this journey with."
Communication Tools	Teams and WhatsApp for formal and informal communication.	"We might have a day together and we've got our own WhatsApp group." "Wow, my first What'sApp message. Whatever next!" "It was productive chat. We've just been learning about MS Teams transcripts"
Shared Purpose	Having an aligned vision and objectives.	"We want to contribute to academia, validate our hypotheses." "We should explore that option next time we are all together." "All contributions welcome."

Theme Identified	Theme Description	Theme in a Dialogue
		"Wow, this chat has been buzzing with activity."
Group Cohesion	Interpersonal connection / cohesion between group members.	"Somehow our paths crossed...we are all in this together." "This was another great get together. Enjoyed it so much." "I hope there's (sic) more opportunities to get together."
Interdisciplinarity	Spectrum of experience across different countries and disciplines.	"Thank you for providing this resource by activating your network." "Thank you for sharing your learning in so many different areas."
Spontaneous Interaction and Unscripted Collaboration	Focus on contributing to academia, sharing knowledge, and working together on research. Spontaneous communication through WhatsApp	"Unscripted collaboration...small sparks of ideation." "I'm free after 10am so we'll see when the others can fit in a meeting."
Belonging and Inclusivity	Feeling accepted as an integral member	"I feel like I've always been part of this cohort." "Welcome to the gang." "I can't wait to meet everyone in person" "Thanks for making this a very special evening for me." "It's the time of year to say thank you for your support. I feel blessed to have you in my life." "Without the good humour and encouragement of this group I'm not sure I would have made it this far."
Fun and Joy	The importance of enjoyment in the research journey.	"The joy of being the researcher and being on this journey" "That was more fun than I thought it would be." "It's done and I'm excited for the feedback."
Diversity	Reference to members from different countries and the importance of language in academia.	"From different countries"

Theme Identified	Theme Description	Theme in a Dialogue
		“...that is difficult to follow for someone who hasn’t seen it and lives sooo far away” (sic).
Academic Discourse, Academic Challenges	Discussion about the difficulties of academic English for non-native speakers.	"Academic English or writing is a totally different story." “I’ve just sent an email that may help towards the definition you were seeking “
Distance Collaboration and Time zone challenges	Recognition of the effectiveness of online tools for maintaining collaboration. Acknowledgment of potential challenges in coordinating meetings across different time zones.	"Connect me from the distance" “Distance doesn't matter. You could be on the other side of the world. I could be on the moon. As long as we've got an internet connection it's just synchronization in time.” “This time is just for us to use as we wish, and it doesn't matter if we can't make it. There will always be times when our jobs get in the way.”
Flexibility and Adaptability	Recognition of the adaptability of the team in using online tools and bridging distances.	"We need to set it up or not everyone is on at the time when we need it. But WhatsApp, we can just throw in something."
Support System and Supportive Environment	Highlighting the value of the group in overcoming the loneliness of doctoral study.	"This group says ‘try this, try that’ and that was so, so helpful." “Can I help?” “Thanks for putting my mind at rest.” “I knew you were there to support me.” “Thank you for keeping me sane!” “Thank you...you supported me emotionally and with compassion.” “It’s a slog and feels a bit lonely at times.” “Well, don’t forget we’re always here if you need a nudge.”

Source: Extract of WhatsApp messages with surfaced themes, 2021-2023

5. Discussion

5.1. CoP formation and development

Tyndall et al. (2019) call for supportive doctoral research communities to exist more prominently as part of the doctoral programme structure and suggest that online formats early in research careers are not ideal, but this study had no option due to the impact of the Covid-19 pandemic and lockdowns. This informal CoP emerged from a pre-assigned mini cohort as part of a doctoral programme, less a means for peer review and more for social solidarity, as the members navigated a new academic pathway (Lave & Wenger, 1991; Wenger-Trayner & Wenger-Trayner, 2015). This informal CoP lacked structure, hierarchy, or purpose other than to provide informal mutual support. Group commitment remains high; non-attendance or engagement is communicated via WhatsApp, more out of courtesy and concern for welfare rather than any formal expectation. The emphasis on participation within this CoP concurs with Tyndall et al. (2019) that doctoral community participation can help prevent attrition.

The emergent themes and corresponding evidence from the transcripts and WhatsApp messages in Table 2 demonstrate a caring, supportive, and flexible CoP, which embraces its diversity, and group dynamic, and fosters a culture of belonging. The informal CoP members work in different subject areas but embrace individuality and the knowledge and expertise that wider networks can bring. The informal CoP has existed for four years but did not meet in person for the first two years, largely because of the Covid-19 pandemic, and gelled over mutual determination to pursue doctoral studies. No negative themes emerged as the members here are free to participate however and whenever they like.

The informal CoP became acquainted with technology such as MS Teams and WhatsApp both professionally and socially throughout the pandemic, and which even now still supports informal CoP meetings. It is unknown whether participants perceived identities would have differed had they been in a classroom together for longer periods of time.

Whilst all informal CoP members are project managers of their own research, CoP participation is not hindered by distance or technology. From the outset as a break-out group in the taught module, virtual participation may have helped overcome hesitancy or nervousness about not being in the same physical room. Indeed, team collaboration is augmented by technologies and utilisation of these can lead to more efficiency in geographically dispersed CoP (Laitinen & Valo, 2018).

This informal CoP has been aligned with Laitinen and Valo's (2018) model which provides areas for interaction and frames for analysis of participant contribution. Although the frame for collaboration included a range of positions, this successful collaboration needed only two frames assisted by MS Teams and WhatsApp. The informal CoP organically started to use MS Teams to establish a work frame, supporting task building and work-related activities; the WhatsApp platform was used to establish a relational frame, establishing deeper relationships between team members. MS Teams and WhatsApp thus offer future doctoral study cohorts a minimum viable solution for effective remote communication and collaboration.

5.2. The CoP Cycle

The phases identified by Zheng *et al.* (2023) align with this CoP’s experiences and the concepts of CoP (Table 2). The original pre-assigned break-out group in the *formation* phase evolved into a recognisable informal group (Zander, 1982). Early WhatsApp messages helped to establish social relationships for the first CoP of four doctoral students. This developed through an *expansion* stage, with the addition of two more students, thereby introducing wider knowledge, experience, and reference, albeit working in very different subject areas. As the students progressed further into individual research phases of their programme, the CoP matched the *transformation* stage, evidenced by the regular online Teams meetings, two social events and collaboration on joint activities, like a research symposium and presentation to other academic research students. This larger CoP proved supportive and productive, leading to group contributions, at seminars and a post-graduate research (PGR) symposium. The CoP is now moving towards the *renewal* phase, as MS Teams sessions are now booked a year in advance. No new members are being sought (one has already completed and left) so the CoP may be viewed as established and engaging in a cycle of activities. When members complete their doctoral studies, this CoP may cease to be useful and *disperse*. As Zanotti and Magallanes (2015) suggest, the media, key participants, and the goals may change, but the core intention, in this case support of CoP members, remains.

TABLE 3: CASE STUDY COP ALIGNMENT WITH LIFECYCLE PHASES

Stage	Description	Authors’ Experience
Formation	Knowledge transfer from university to CoP	Formal taught module leads to informal CoP formation <i>“My first WhatsApp message”</i>
Expansion	Sharing best practice and intra- learning	Members begin to meet regularly on an informal basis to discuss their own projects, share challenges and solutions <i>“Thank you for providing this resource”</i> <i>“Welcome to the gang”</i>
Transformation	Co-production of knowledge	Delivering a research symposium session encouraging other early researchers to form informal supportive groups. <i>“I hope there’s more opportunities to get together”</i>
Renewal	Collaboration Knowledge dissemination	Writing academic articles together. <i>“That was more fun than I expected”</i>

Source: Based on Zheng et al., 2023

The findings of Lahenuis (2012) largely align with the experiences of this informal CoP in that it came together for scholarly development, peer support, friendship, and a sense of belonging to a community to overcome isolation. Also, having an academic staff member in the community at the early stage of formation is beneficial (Devenish et al., 2009, cited in Lahenuis, 2012).

Engagement in groups can provide a strong social support. It enhances academic ventures, speeds completion, prepares participants for further progression in academia and their identity can develop in a critical but safe space (Tyndall et al., 2019). A desire for these to be prominent in doctoral programmes is evident and, alongside this case study, confirms that such communities are effective in combatting loneliness, attrition and providing safe spaces for practical, personal and identity development (Tyndall et al., 2019).

5.3. Distance, Identity & Belonging

The conveying of complex ideas, personalities and personal feelings were accomplished using technology, evidenced by Student B saying, “*Connect me from a distance*”. Virtual convenience and flexibility were welcomed as the commute to campus for taught workshops was eliminated, particularly so for the group member living in Germany. However, this resulted in less connection and camaraderie with the wider module group; the informal CoP’s two most recent additions had not had the same group cohesive experience as the original four as no CoP was established by their mini formal group at the taught stage.

Networking between individuals, mutual prior experience of the university and the caring nature of the supervisor impacted on the identities of individuals with some initial recognition of the CoP’s “*technological whiz kid*”, another as the “*organiser*” and another as the “*technical writer/editor*” (Salimi & Banitalebi, 2023). Identity is associated with participation in communities (Goode, 2010) and informal discourse helped CoP members evolve their new professional and sometimes personal selves in a safe and supportive space. Identity-wise, the doctoral journey can be confusing, especially as mature part-time students, with responsibilities as professional employees elsewhere, and as individuals, trying to establish themselves in an academic sphere. The contribution of the context is immense (Baker & Lucatta, 2010) and it is easy to see how group members may form multiple identities as they combine study, family, caring and work commitments. As almost all early contact was online, here, the CoP members did not have to differentiate, transition, and adjust from the classroom to the virtual context (Salimi & Banitalebi, 2023), making coalescence easier.

The struggle to remain focused and engaged is demonstrated by Student A stating, “*Without the good humour and encouragement of this group I don't know if I would have made it this far*”. Greener (2021) identifies that isolation at doctoral level for Business and Management students can lead to attrition. Williams (2019) found that even prior to the Covid-19 pandemic, a quarter of post graduate students considered withdrawing from their courses, highlighting that additional contact and support contributes to student wellbeing. Greener (2021) states over a third of students seek support with depression and anxiety, suggesting that institutional support is essential for student wellbeing beyond taught programme elements. The informal CoP finally met in person in February 2023, prompted by a conference resulting in a social evening together. A second social event took place before Christmas 2023, but distance prevented another member’s attendance. This case study CoP maintains a supportive environment, demonstrating that SBT can occur in a remote learning environment if the social relationships are close, rich, and maintained through digital and virtual forums (Beckes & Sbarra, 2022).

Engaging in *academic* learning alters our self-perceptions (Packer & Giocochea, 2000) and CoP participation engenders a sense of belonging (Botelho de Magalhães et al., 2019), particularly if a student is an active participant in a discussion group (Seyri & Rezazee, 2022). Member C said, “*It's a slog and feels a bit lonely at times*”, demonstrating that a like-minded

community provides reassurance on the one side, and a sounding board on the other has a reassuring effect; member D responded “*Well, don’t forget we’re always here if you need a nudge.*” Even if no CoP member can actively problem solve, the presence of ‘*someone else*’ being there can alleviate negative feelings.

The power of social connections here was impacted by the Covid-19 pandemic, and this restricted ways of communicating, strong and well-established social connections drive towards higher capabilities of the individual and regulate IQ performance, and drive motivation (Marler et al., 2021). Inclusivity and belonging are important to maintain focus, wellbeing, and a sense of connection. Individuals are adopting the motivations and goals stated by others within the group, emphasizing the phenomena of the mechanics of social coordination (Bacon, 2023).

5.4 Fun and Joy

Making the doctoral research enjoyable, maintaining momentum, and deriving satisfaction can be highly challenging. While Davis et al. (1992) describe that enjoyment can be defined as an activity that provides pleasure, regardless of the results, working on research part-time, while juggling various prosaic activities, requires a great deal of motivation sparked seemingly out of thin air which can make finding the pleasure sometimes challenging. Pe-Than et al. (2014) emphasise that autonomy, competence, and relatedness can drive enjoyment. Relatedness is represented in this CoP as being connected to other individuals, and research activity in this CoP’s case (Peng et al., 2012).

The group achieved enjoyment, one of the ingredients of joy which can potentially be identified as a key aspect in making this CoP successful and functional (Pe-Than et al., 2014). Moreover, perceived autonomy contributed to intrinsic motivation, which supports the process of research and learning of the individuals, supporting basic psychological needs (Ryan & Deci, 2020).

Humour can help with stress and tension relief, as evidenced in less formal WhatsApp discussions among informal CoP members. These joyful interactions, particularly at times of stress, may also be identified as a coping mechanism, whilst increasing resilience (Kim & Plester, 2021). Messages ridiculing our doctoral research journey, and laughing at our mistakes and shortcomings bring a sense of emotional regulation and perspective which can be described colloquially as “keep calm and carry on”.

5.5. Study Limitations

This paper has focused on a small-scale study of one small informal CoP of four part-time doctoral students who are also the authors of this paper, along with their supervisor. It was based on our immediate informal reactions and thoughts, captured in verbal and written discussion amongst the informal CoP members. Scale of study, data collection and analysis, and risk of bias, minimise generalisability.

6. Conclusion

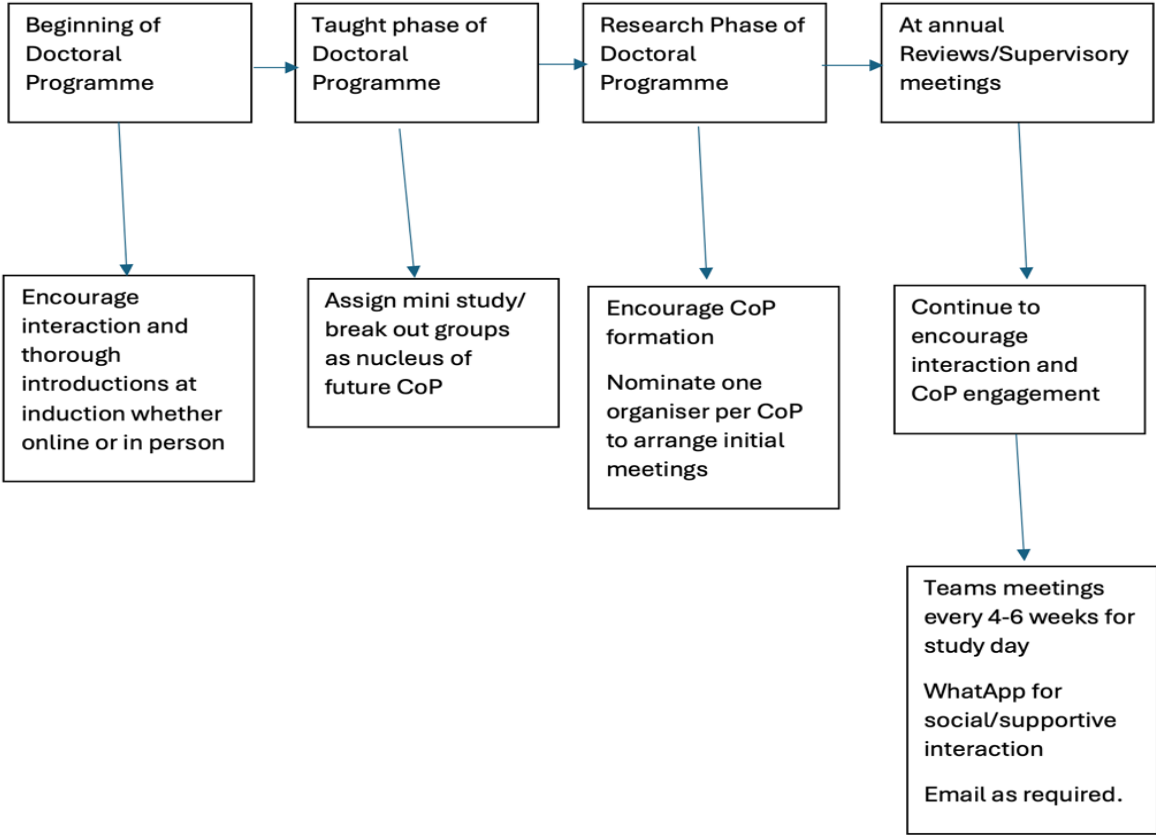
This study concurs with the views of Lahenius (2012) and Subedi *et al.* (2022) in that engaging in peer support has a positive effect on the experience of, in this instance, part-time doctoral students and therefore promotes their likelihood of success. The results support the notion that engaging in a CoP is a positive experience and should be encouraged. Lee et al. (2015) described CoP as a possible mechanism for improving knowledge sharing and whilst web

technology had not increased the intensity of participation in CoP, overall, there was evidence of individual benefit from CoP participation. This informal CoP's experiences thus far conform to a recent CoP lifecycle (Zheng et al., 2023). The study builds upon the extant literature, specifically the works of Vacek et al. (2021) and Carson and Nicklasson (2023) by offering valuable insights into the real-world experiences of professional doctoral students who have created a digital CoP as they have been completing their studies at a UK Business School.

The challenges of CoP participation might include overcoming personal differences and the time and commitment to maintain contribution. Possible drawbacks of not finding a CoP include isolation and foregone opportunities.

Although the findings here are limited, this study still evidences this case study informal CoP has worked for the individuals concerned and that grouping for social solidarity can contribute to continued engagement, fun and student wellbeing, whilst hopefully avoiding the common contemplation of leaving doctoral programmes (Williams, 2019). Members here remain engaged, and the initiative continues to provide the essential missing elements outside of taught study of ongoing support, friendship, joy, fun and an essential source of humour for all involved. Given this informal CoP's positive experience, the conceptual model in Figure 1. is offered as a guide for doctoral programme faculties and students to promote a safe space to encourage wellbeing and success.

FIGURE 1. CONCEPTUAL MODEL FOR DOCTORAL CoP



Source: Own compilation

Participation in this informal CoP is having a positive effect on the authors' doctoral learning experience, has deterred attrition, and could act as a beneficial model for other doctoral students or faculties to promote friendship, camaraderie, resilience, joy, and completion. Formal small group formation at doctoral programme induction phase, followed by programme leaders and supervisors' encouragement of students to organise their own regular study days and use of social channels, may have a profound impact on overall success. Application and adaptation of this doctoral CoP model could form the basis of future research.

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Corresponding Author

The corresponding author for this manuscript is Jan Jones who can be contacted by email via jan.jones@chester.ac.uk.