Cogent Education

ISSN: 2331-186X (Online) Journal homepage: www.tandfonline.com/journals/oaed20

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To cite this article: Oindrila Dutta, Devanshi Vikamsey, Nazima Ahmed & Rebecca Smith (2025) Qualitative study on enhancing employability in psychology undergraduates: autonomy, competence and relatedness through SDT-inspired internships, Cogent Education, 12:1, 2597055, DOI: 10.1080/2331186X.2025.2597055

To link to this article: https://doi.org/10.1080/2331186X.2025.2597055

COGENT EDUCATION
2025, VOL. 12, NO. 1, 2597055
https://doi.org/10.1080/2331186X.2025.2597055

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Qualitative study on enhancing employability in psychology undergraduates: autonomy, competence and relatedness through SDT-inspired internships

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ABSTRACT

This study examines how Self-Determination Theory (SDT)-inspired internships can bridge the gap between psychology education and professional employability. Focusing on undergraduate psychology students, we explore the lived experiences of participants in an SDT-based internship program, analysing how it fosters autonomy, competence, and relatedness. Qualitative thematic analysis of in-depth interviews with 10 students revealed improvements in professional competencies, personal development (e.g. internal growth and external adversity management), and enhanced career readiness. The findings underscore the imperative for psychology curricula to integrate experiential learning opportunities that intentionally cultivate these psychological needs, moving beyond traditional academic instruction. This approach not only enhances career prospects but also promotes a deeper, more meaningful engagement with the discipline, preparing graduates to thrive in diverse professional landscapes and challenging existing pedagogical imbalances.

ARTICLE HISTORY
Received 24 June 2025
Revised 27 October 2025
Accepted 25 November 2025

KEYWORDS
Employability; internships; Self-Determination Theory (SDT); autonomy; competence; relatedness; experiential learning

SUBJECTS
Social Sciences; Education; Higher Education; Social Sciences; Education; Higher Education; Study of Higher Education; Social Sciences; Education; Higher Education; Teaching & Learning

The persistent and widening gap between psychology education and career opportunities has become a critical concern, gaining significant attention in recent years. Despite an increasing number of psychology graduates, many struggle to secure roles that align with their educational background, often facing challenges in translating academic knowledge into employable skills; this issue is underscored by data revealing that only 6% of graduates go on to become registered psychologists (Palmer et al., 2021).

Research indicates that psychology curricula often disproportionately prioritize theoretical knowledge and research skills, at the expense of practical, career-oriented training, thereby contributing to this vocational misalignment (The British Psychological Society, 2023). This pedagogical imbalance leaves a large proportion of graduates feeling underemployed or working in roles unrelated to psychology; for instance, only 27% of psychology bachelor's degree holders secure jobs directly related to their field (American Psychological Association, 2021). Furthermore, graduates' initial aspirations, such as entering clinical psychology, often diverge from their eventual career outcomes (Palmer et al., 2021).

This article explores how internships inspired by Self-Determination Theory (SDT) can address this gap by intentionally fostering autonomy, competence, and relatedness, thereby enhancing employability among undergraduate psychology students. Through a review of existing literature, it examines the entrenched challenges faced by psychology graduates and investigates the potential of experiential learning to bridge what appears to be a disconnect between academic training and career readiness.

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Literature review

Challenges in aligning psychology education with career outcomes

The British Psychological Society (BPS) accredits undergraduate programmes to ensure they meet specific standards, yet these often focus on preparing students for postgraduate education rather than immediate employment (The British Psychological Society, 2023). As a result, many graduates feel unprepared for the workforce, with only 59% considering their job to be within the field of psychology three years after graduation (Palmer et al., 2021). This misalignment between education and career outcomes is further compounded by the lack of explicit emphasis on transferable skills such as teamwork, communication, and project management, which are highly valued across industries (Schweinsberg et al., 2021). Studies have highlighted that graduates often feel underconfident and underprepared for the transition from academia to the workplace, particularly in fields like psychology that combine specialised knowledge with broader, adaptable skills (Sanderson et al., 2022).

The role of internships in bridging the gap

Internships have been identified as a key strategy for enhancing employability by providing real-world experience and practical skill development. Internships, as a form of work-integrated learning, improve students' job prospects by allowing them to apply theoretical knowledge in professional settings while also developing career management competencies through supporting their ability to articulate and transfer skills across contexts (Gault et al., 2010; Jackson & Wilton, 2016). These experiences also foster essential competencies such as communication, teamwork, and problem-solving, which are critical for workplace success (Ismail, 2018; Kapareliotis et al., 2019).

Internships can also address the systemic gap between theoretical training and practical application, which often leaves graduates ill-prepared for professional roles. For example, in education, this disconnect can lead to challenges in applying appropriate teaching strategies, resulting in uncertainty and reduced effectiveness in practice (Kinyaduka, 2017). By integrating hands-on experiences into the curriculum, internships offer students opportunities to build confidence and refine their skills in real-world contexts (Anjum, 2020).

Self-Determination Theory as a framework for internships

Ryan and Deci's Self-Determination Theory (SDT) provides a framework for understanding how internships can enhance employability. According to SDT, human motivation is driven by the satisfaction of three basic psychological needs: autonomy, competence, and relatedness (Ryan & Deci, 2000, 2020). Within this context, autonomy refers to students' ability to govern their learning and decision-making processes. In internship settings, the provision of autonomy enables students to assume ownership of their tasks, thereby nurturing intrinsic motivation and self-confidence (Ryan & Deci, 2000, 2020). Competence involves the opportunities internships provide for students to develop and exhibit their skills in a professional environment. Engaging in challenging tasks and receiving constructive feedback contributes to the enhancement of self-efficacy and engagement (Ryan & Deci, 2000, 2020). Relatedness emphasizes the importance of forming connections with peers, mentors, and professionals, which is vital for motivation and well-being. Internships that encourage collaboration and networking foster a supportive atmosphere, promoting a sense of belonging (Baumeister & Leary, 1995). However, large class sizes and limited student-teacher interactions in traditional educational settings can hinder the fulfilment of these psychological needs (Fortes & Tchantchane, 2010). This underscores the importance of creating experiential learning opportunities that address these challenges and promote a sense of community and individual growth.

Benefits of experiential learning

Internships not only enhance employability but also contribute to students' holistic development. By combining academic knowledge with practical application, internships help students develop a range of

skills, including critical thinking, adaptability, and interpersonal communication (Kapareliotis et al., 2019). These experiences also provide networking opportunities, allowing students to build professional connections and gain insights into their chosen field (Ismail, 2018). Moreover, internships have been shown to increase students' motivation and confidence, preparing them for the transition from academia to professional roles. For instance, students who participated in internships reported higher levels of self-assurance and readiness for workplace challenges (Supriyanto et al., 2022).

Implications for psychology education

As highlighted in the preceding literature review and corroborated by findings from other research (Shore & Dinning, 2023), addressing the gap between psychology education and career readiness requires the integration of experiential learning opportunities into the curriculum. This includes not only internships but also workshops, mentorship programmes, and collaborative projects that foster autonomy, competence, and relatedness (Y. Wang et al., 2024). Such initiatives can help align students' academic training with the demands of the labour market, ultimately enhancing their employability and professional success (Spanjaard et al., 2018). By adopting a holistic approach to education that incorporates SDT principles, psychology programmes can better prepare graduates for diverse career paths, ensuring they have the skills, confidence, and networks needed to thrive in their chosen fields (Yan et al., 2021).

Study aim

Building on this foundation, the aim of this research is to improve undergraduate education by examining the lived experience of students who participated in an employability internship programme based on the principles of Self-Determination Theory. By examining students' experiences, the study seeks to assess how the programme fosters autonomy, competence, and relatedness, and how these factors contribute to enhancing career readiness and employability. This research aims to provide actionable insights to inform the development of more effective and inclusive psychology curricula that prepare students for diverse career paths.

Methodology

Description of the SDT-inspired employability internship

As part of the SDT-Inspired Internship developed for this research, undergraduate psychology students (first and second-year volunteers) were engaged to acquire essential transferable skills (including public speaking, communication, teamwork, and research proficiencies), thereby enhancing their confidence and deepening their understanding of professional work environments. The programme involved a school visit where university staff and student interns disseminated information regarding university-level psychology teaching and career paths. The internship offered student-interns 13 hours of practical work experience, which were formally credited towards their academic requirements. No additional financial stipend was provided for participation.

Training

Prior to the internship, student-interns participated in a preparatory training programme consisting of two group sessions. The initial session outlined objectives and expectations. Recognizing self-identified needs, such as apprehension regarding public speaking, the training structure maintained flexibility. Interns collaborated with staff to develop relevant materials and practiced delivering presentations during the second session, engaging in peer feedback and problem-solving exercises to anticipate potential challenges.

School visits

Student interns contributed to the planning and development phases of the school visit, including designing and proposing delivery methods of relevant educational materials. On the day of the visit, which consisted of six sessions, student-interns assumed responsibility for facilitating sessions with the schoolchildren. Their roles encompassed presenting content, providing support to staff members and peers, and collecting data.

Support and feedback

Throughout the internship, student-interns received continuous support and guidance from the researchers and lecturers. Before the visit, staff met with interns to finalize the design and delivery of materials. Staff members led the initial session, after which student-interns were granted increasing levels of autonomy in subsequent sessions. A staff member responsible for training circulated between sessions to monitor student well-being and provide encouragement. Following the visit, student-interns also received constructive feedback on their performance.

Research approach and design

This study adopted a constructivist paradigm to explore the narratives of Level 5 undergraduate psychology students at a British university. The aim was to understand the meanings they attributed to their experiences of participating in a self-determination theory (SDT)-inspired internship programme. The study sought to identify patterns and shared themes within participants' narratives (Creswell et al., 2007). A phenomenological approach was employed to prioritise participants' experiences and their capacity to construct meaning, enabling dialogue between the researcher and participants. This co-constructive process generated findings with moderatum generalisation, meaning the findings could be applied to similar contexts with comparable physical and cultural characteristics (Williams, 2002).

Sampling

Purposive sampling was adopted to recruit participants. Student-interns enrolled in the internship programme were emailed an invitation to participate in the study. The target sample size was 10, considered sufficient to achieve theme saturation (Wutich et al., 2024). Inclusion criteria required participants to: (1) be Level 5 (second year) undergraduate psychology students at the university and (2) be enrolled in the SDT-inspired internship programme. The study purposefully focused on Level 5 students because they possess the necessary academic foundation while being at a crucial stage for vocational identity formation. Level 5 students have sufficient theoretical knowledge to apply concepts practically, but still have time remaining in their degree to integrate the experiential learning into their career planning and remaining studies. Level 4 (first year) students were not included as these students have had less exposure to core psychology theories and specialised methods and might struggle to apply discipline-specific knowledge, which is a key component of the internship's design and the concept of competence in SDT. Level 6 (third year) students were not included as their responses could be driven by the immediacy of graduation and job searching, potentially introducing bias related to career-anxiety or focusing predominantly on the resume-boosting element of the experience. Students unable to communicate in English or provide informed consent were excluded.

Participant recruitment

A staff research assistant at the university identified and contacted potential participants via email. To ensure participation was voluntary and to mitigate any risk of coercion (given the involvement of lecturers), the research team implemented several safeguards: Recruitment materials, specifically, the participant information sheet explained the research in detail, emphasising that participation was voluntary and that participants had the right to refuse or withdraw at any time without with no obligation or need to explain their decision, and with no negative consequences. An independent member of the

research team—a staff research assistant—managed the recruitment and consent process, separating it from the teaching staff to eliminate any perceived pressure on students. The participant information sheet stated that no research activities would take place during teaching time and that the research would not utilise any student data that university staff could access but was not approved for research use.

Those who expressed interest were provided with a detailed participant information sheet and invited to schedule two interviews: one before the internship (pre-interview) and one after its completion (post-interview). This allowed for the collection of data on participants' thoughts, feelings, and aspirations both before and after the internship. A total of 17 students partaking in the SDT-inspired internship were invited to participate in the study.

Data collection

A semi-structured interview schedule was developed to explore participants' experiences, expectations, and reflections on the internship programme. The questions were explicitly designed to target the three core psychological needs proposed by SDT: autonomy, competence, and relatedness. Pre-internship questions focused on motivations, anticipated outcomes, and existing preparedness (Competence), alongside participants' initial perceptions of autonomy. Post-internship questions addressed their overall experiences and specifically targeted the satisfaction of the SDT needs including autonomy (e.g. independent decision-making, ownership of tasks, and self-direction in learning), competence (e.g. skill development, successful application of knowledge, challenges faced, and self-efficacy enhancements) and relatedness (e.g. relationships with peers and staff, collaboration experiences, and feelings of belonging). The schedule also explored the programme's overall impact on personal, academic, and professional growth.

A researcher from the team conducted interviews with participants individually using Microsoft Teams. Each interview was about 60 minutes long and was recorded using the platform's recording feature. Participants provided written informed consent before the interview and received a debrief form afterward. Regular debriefing sessions between the research assistant and the principal investigator ensured investigator triangulation and supported multiple perspectives in data interpretation. All interviews were audio-recorded and transcribed verbatim. Transcripts were reviewed by the first author to ensure quality. Participants received a £20 cash voucher for each interview (£40 in total) as a token of appreciation for their time.

Data analysis

Audio recordings were transcribed using Microsoft Word. A structured tabular thematic analysis (ST-TA) approach (Robinson, 2022) was employed, involving systematic tabulation of data during each stage of analysis. Initial codes were generated and organised into tables, followed by the identification of overarching themes and sub-themes. Major categories and their corresponding themes were refined iteratively, and key findings were supported by illustrative examples drawn directly from the data. To ensure rigour and trustworthiness, mechanisms such as debriefing, cross-checking preliminary themes against subsequent data, inter-researcher consensus, and theory triangulation were implemented (Guba, 1981; Shenton, 2004).

Ethics statement

The study received ethical approval from the University of Greenwich Research Ethics Committee [UREB/23.5.6.g]. The research team, including the principal investigator, was qualified to provide emotional support to participants during data collection. Participants were also provided with written information about mental health support services available at the university, detailed in the participant information and debrief sheets, to ensure access to further psychosocial support if needed.

Table 1. Demographic information of participants.

Participant ID	Ethnicity	Prior educational qualification	Employment status during university studies
P01	Asian/Asian British	Bachelor's degree	Part-time employed
P02	White/Caucasian	High school/college graduate, diploma or equivalent	Full-time employed
P03	White / Caucasian	High school/college graduate, diploma or equivalent	Student
P04	Asian/Asian British	High school/college graduate, diploma or equivalent	Part-time employed
P05	White/Caucasian	High school/college graduate, diploma or equivalent	Student
P06	Asian/Asian British	High school/college graduate, diploma or equivalent	Part-time employed
P07	Asian/Asian British	High school/college graduate, diploma or equivalent	Part-time employed
P08	White/Caucasian	Trade/technical/vocational training	Part-time employed
P09	White / Caucasian	High school/college graduate, diploma or equivalent	Student
P10	White/Caucasian	High school/college graduate, diploma or equivalent	Unemployed (not looking for work)

Findings

Ten students accepted the invitation to participate in the research and consented to take part. All participants completed both the pre-internship and post-internship interviews. All participants were female, aged 18–24, and none were married or had ever been married. The group included six participants identifying as White/Caucasian and four as Asian/Asian British. Prior to commencing their undergraduate studies, eight participants had completed high school/college qualifications or equivalent, one held a bachelor's degree, and one had completed trade or vocational training. Employment status during university studies varied, with five participants employed part-time, one employed full-time, three identifying as students without employment, and one unemployed and not seeking work. Detailed information about participants' demographics can be seen in Table 1.

The data revealed six themes which together encapsulate participants' reflections on their experiences, challenges, and suggestions for improvement. The overarching themes are: Holistic Skills Development, Internal Growth and Flexibility in Approach, Collaborative Critical Thinking, External Adversity Management and Strategic Resourcefulness, Future Career Readiness and Enhancing Programme Delivery. All themes were endorsed by all participants, either during the pre-internship interview, the post-internship interview, or both. Each theme is discussed below and illustrated with relevant quotations from participants.

Theme 1: Holistic skills development

This theme directly illustrates the fostering of Competence and Relatedness. Participants highlighted improvements in both practical and interpersonal skills during their internship experiences, demonstrating a holistic development of competencies necessary for professional integration. These improvements enhanced their sense of competence (through practical application) and relatedness (through enhanced interpersonal interaction). Many participants reported improvements in their ability to manage tasks directly relevant to their future careers. They explained that exposure to new tools, technologies, and techniques during the internship equipped them with valuable, job-specific skills, thereby fostering domain-specific competence. For instance: 'This is something that I would love to do. So, I want to work as a research assistant, so I thought this would be a great chance to get to know all the equipment that are used in research.' (P01). Another participant further added, 'It definitely showed me that I was able to do that, and that I could start looking for something to get ready and to get professional experience.' (P05). These accounts underscore how experiential learning directly facilitates the development of practical, career-aligned skills.

Participants also highlighted the development of interpersonal skills, particularly in communication and teamwork. Many reflected that the internship provided opportunities to engage with a diverse range of individuals, which helped them improve their ability to collaborate and communicate effectively in professional contexts. One participant noted: 'I believe a lot of the skills I picked up are very transferable. I think in terms of communicating, especially, I know that I am capable of doing that, and I can communicate, not only just a friendly way, but also a professional way, to people of different ages.' (P07). Another explained, 'I'd say communication, just communication with my group and

communication with the kids definitely did develop.' (P04). These narratives illustrate the internship's role in cultivating essential transferable skills critical for broader professional success.

Theme 2: Internal growth and flexibility in approach

Participants described their internship experiences as facilitating personal growth, particularly concerning self-awareness, confidence, and flexibility in approach, reflecting the fulfilment of autonomy and supporting the growth of competence. Many participants spoke about the role of the internship in helping them gain clarity about their career aspirations and develop greater self-assurance in their abilities. This reflects an enhancement of self-efficacy and a clearer vocational identity. One participant explained: '… Now I feel a lot more confident talking to like sixth form students, because I know I want to go into education.' (P02). Another reflected, 'I guess just applying what I've learned, because being in a school is something I would consider as a career.' (P03). These reflections indicate how direct application of knowledge in a real-world setting reinforces students' sense of capability and purpose.

The internship experience also fostered greater professional flexibility in participants, with many expressing how they had to adjust to new situations and challenges. This enhanced their ability to remain agile and open to change. One participant shared: 'So like, when one activity didn't work, we changed it slightly to being flexible.' (P03). Another added, 'It definitely showed me that I was able to do that, and that I could start looking for something to get ready and to get professional experience.' (P05). These instances demonstrate the development of a flexible mindset and proactive adjustment in dynamic, unpredictable environments.

Theme 3: Collaborative critical thinking

This theme demonstrates the critical role of relatedness and competence. Participants noted that their ability to collaborate and work as part of a team was one of the key aspects of their internship experience, leading to the development of critical thinking within a collaborative context. This team-based approach was fundamental in fulfilling the psychological needs of relatedness and enhancing collective competence. Many participants reported that working in teams with individuals from diverse backgrounds and experiences provided opportunities for learning and growth. However, some also noted the challenges inherent in coordinating group efforts and managing differing work styles. One participant noted: 'The only thing I'd say is it was quite difficult getting the group together, but I think that's just more an individual thing, because individuals wouldn't respond, or take, like, a long amount of time to respond when we only had a short period of time to actually work on our presentation.' (P04). Another shared, 'I told her, what I could do is, if you do forget to say something, I'll get it … I'll intervene and say what you forgot to say.' (P05). These examples highlight both the benefits and complexities that emerge when engaging in collaborative tasks in a professional setting.

Participants further highlighted that working with others enabled them to solve problems collectively, which helped them develop critical thinking and communication skills, particularly when unexpected issues arose. One participant shared: 'If someone (referring to a student) is crying, you need to think quickly, like, what to do with them.' (P09). Another added, 'So we changed our method in how we would count who is partaking and who isn't … we ended up just getting all the students to stand up, reading aloud their names and doing it like that.' (P06). These instances demonstrate the development of practical problem-solving skills within a team setting, fostering a sense of collective competence and shared responsibility.

Theme 4: External adversity management and strategic resourcefulness

Participants reflected on the various challenges encountered during the internship and articulated how their strategic responses to these obstacles fostered competence in adversity management, which enhanced their sense of competence and autonomy through self-regulation. Participants described a range of challenges, including logistical issues, interpersonal difficulties, and emotional pressures, particularly when confronted with novel and demanding tasks. Despite these obstacles, many developed strategic coping mechanisms and persevered. One participant shared: 'I think like handling new

equipment, because I'm not familiar with it, and I haven't done this previously.' (P01). The same participant later noted: 'The presentation was sent to us one day before. So, I was really nervous about the Stroop task (referring to one of the planned activities) … so I had to research the theories up just one day before.' (P01). These examples illustrate the initial struggles and the need for self-directed preparation and strategic adjustment.

Participants also discussed ways in which they developed and demonstrated strategic resourcefulness by employing proactive strategies to cope with the challenges they encountered. These included prioritizing tasks, modifying their problem-solving approach, and seeking support from others. One participant explained: 'I think I would be able to do it well with prioritising and task management.' (P01). Another added, '… It was four of us and the researcher. So, we're just walking from table to table, standing near the ones (referring to the students) who [are] talking the most – because somehow when you approach them, even for a little bit of time, they go quieter.' (P09). These narratives showcase a practical and self-regulated approach to overcoming obstacles, enhancing their perceived competence and ability to manage complex situations.

Theme 5: Future career readiness

The internship experience had a positive impact on participants' perceived readiness for future careers, improving their employability and clarifying their career trajectories, thus fostering both competence and autonomy. These outcomes were achieved by fostering increased competence and providing participants with the autonomy necessary for self-directed career planning. Many participants felt that the internship directly improved their employability by providing practical skills and increasing their confidence in their career paths. This indicates a direct link between experiential learning and enhanced career self-efficacy. One participant shared: 'This is something that I would love to do. So, I want to work as a research assistant, so I thought this would be a great chance to get to know all the equipment that are used in research.' (P01). Another noted, 'I think it's (referring to the internship experience) definitely going to look good for employability.' (P02). These statements underscore how direct experience validates aspirations and builds confidence in professional capabilities.

Participants recognized the value of the internship in aligning with their long-term career goals, offering them a clearer sense of direction and the necessary skills to pursue their aspirations. One participant stated: '… would help me in my future endeavours as a clinical psychologist.' (P01). Another shared, 'I can use the experience and skills I got from here for that [university] assignment, but also when applying for placements next year.' (P06). This demonstrates the practical application of learned skills and a more defined career trajectory, reflecting enhanced autonomy and purpose in career planning.

Theme 6: Enhancing programme delivery

Participants provided several valuable suggestions for improving the internship programme, focusing on organizational aspects, communication, and support for future participants. These suggestions primarily focus on enhancing future participants' sense of relatedness and competence. Many participants offered insights into refining logistical support and preparation to maximize the intern experience. One participant noted: '… making some sort of Teams group or WhatsApp group for the students, because a lot of us didn't know each other at all to start with, and it was nice getting to know each other.' (P03). Another suggested: 'I think there could have been more rehearsal on the presentation bit, because I have difficulty when doing presentations.' (P01). These suggestions highlight specific areas where structured support and preparation could be enhanced to improve the overall intern experience and foster a greater sense of relatedness.

Participants also offered suggestions to better support future participants, including broadening training topics, improving communication, and offering more opportunities for reflection. One participant suggested: 'I think the training can be improved by future events through more new equipment and [covering] different topics.' (P01). Another recommended, 'Maybe if you could do a vote or find a common time (referring to the scheduling of the pre-internship training programme) that would suit everyone – maybe later in the evening, that would have been better for me personally.' (P02). Such feedback

offers insights for optimizing programme design and fostering a greater sense of relatedness and competence through tailored support and improved communication strategies.

In summary, the findings highlighted that the internship programme had a positive impact on participants' skills development, personal growth, and career readiness. The challenges participants faced were met with strategic resourcefulness and competence in adversity management, and their experiences provided insights into how the programme could be improved through enhancements to its structure, communication, and training components

Discussion

The findings of this study underscore the usefulness of Self-Determination Theory (SDT)-inspired internships in comprehensively enhancing employability by intentionally fostering autonomy, competence, and connectedness among undergraduate psychology students. The emergent themes resonate with existing literature on experiential learning, holistic development, and skills-based education, offering insights into how conventional psychology curricula can be restructured to more effectively prepare students for their future careers.

Integration of experiential learning

The findings highlight the importance of integrating experiential learning in bridging the gap between theoretical knowledge and practical application, a common critique of traditional psychology education. Internships provided participants with invaluable opportunities to apply abstract academic concepts in tangible, real-world settings, thereby enhancing both autonomy and competence. This finding is consistent with previous research (Van Wart et al., 2020) indicating that experiential learning, such as internships, improve employment prospects and job-related skills. Specifically, this study argues that the systematic and mandatory integration of internships or fieldwork into psychology curricula is not merely beneficial but an imperative to promote career-oriented education and better prepare students for complex professional challenges.

Focus on holistic development

The themes of connectedness, autonomy, and competence indicate the necessity for an education that extends beyond mere academic instruction to include interpersonal and intrapersonal skills. Participants consistently valued the meaningful relationships formed with peers and mentors, as well as the demonstrable development of self-directed learning capabilities. These findings align with the core principles of SDT, which posits that fulfilling the basic psychological needs of autonomy, competence, and relatedness is essential for optimal functioning and well-being (C. K. J. Wang et al., 2019). Consequently, incorporating activities such as collaborative teamwork, structured self-reflection, and adaptability exercises into psychology programmes can enhance students' preparedness for the dynamic and often unpredictable realities of workplace dynamics.

Encouraging autonomy

The development of autonomy through internships was a key factor in building participants' confidence and independent decision-making skills. Participants explicitly reported managing tasks independently and solving problems without constant supervision, which are critical competencies in diverse professional settings. This observation is supported by SDT, which emphasizes the pivotal role of autonomy in fostering intrinsic motivation and sustained engagement (Wang et al., 2019). Therefore, a redesign of classroom activities to include more student-led projects and self-directed learning opportunities is crucial to further encourage autonomy and more effectively prepare students for their future careers, moving beyond passive learning paradigms.

Competence through skills-based learning

The acquisition of field-specific skills, such as research methods and communication, was highlighted by participants as an important and tangible outcome of their internship experiences. This finding underscores the importance of skills-based learning in enhancing employability. Previous studies have demonstrated that internships and practicum experiences enable students to apply discipline-related knowledge in practice, leading to the development of new skills and adaptive attitudes (Simons et al., 2012). Therefore, psychology programmes should re-evaluate their offerings to systematically integrate workshops or practical courses specifically focused on essential professional skills like assessment, counselling, advanced research methods, and data analysis to complement traditional theoretical instruction.

Enhancing connectedness

The sense of connectedness fostered through the internship programme emerged as a key theme. Participants valued the authentic relationships built with peers, mentors, and professionals, which contributed to their personal and professional development. This finding aligns with SDT's assertion that relatedness is a fundamental psychological need that positively influences motivation and well-being (C. K. J. Wang et al., 2019). Educators should therefore consciously and actively create environments that deliberately facilitate relationship-building and diverse networking opportunities, such as structured mentorship programmes and collaborative projects, to cultivate a sense of community and foster critical professional readiness among students.

Implications for practice

The insights gained from this study have several critical implications for the design of psychology curricula and internship programmes. Universities should prioritize and mandate integrating experiential learning opportunities, such as internships and fieldwork, to enhance employability outcomes. Educators should adopt a holistic and reflective approach to teaching that emphasizes interpersonal and intrapersonal skills alongside traditional academic content. Fostering autonomy and competence can be achieved through student-led projects, self-directed learning opportunities, and specialized skills-based workshops. Additionally, creating environments that actively promote connectedness through structured mentorship and intentional collaboration should be a focus, as it contributes to students' sense of belonging and professional readiness. By addressing these areas, psychology programmes can better equip graduates with the essential skills, confidence, and professional networks necessary to not just succeed, but to thrive in their future careers, challenging the current status quo.

Limitations, future directions and conclusion

While this study provides insights into the crucial role of SDT-inspired internships in enhancing employability among undergraduate psychology students, several limitations should be acknowledged. First, the small sample size limits the broad generalisability of the findings. Specifically, the sample lacked gender diversity as all participants were female, and, despite variations in ethnicity and indicators for socio-economic background (prior educational qualification and employment status, detailed in Table 1), this homogeneity restricts the interpretation of findings across different demographic groups. Moreover, participants were recruited from a single institution, which may not accurately reflect the diverse experiences of psychology students in different universities or varied cultural contexts. Second, the study focused on the immediate outcomes of the internship programme, without exploring its long-term impact on career progression or sustained employability, thus posing a gap in longitudinal understanding. Next, the reliance on self-reported perceptions and experiences introduces the possibility of bias, as participants may have provided socially desirable responses or struggled to recall certain aspects accurately, necessitating triangulation with objective measures in future research. Finally, the study primarily examined the psychological needs of autonomy, competence, and relatedness, without delving deeply

into other influencing factors, such as specific organisational support structures or external labour market barriers to employment, which warrant further investigation.

Building on these findings, future research could explore the following avenues: (1) Future studies should include a larger and more diverse participant pool across multiple institutions and cultural settings to enhance the generalisability of results. (2) Longitudinal research could investigate how SDT-inspired internships influence career trajectories, professional development, and sustained employability over extended periods, providing a more comprehensive understanding of their lasting impact. (3) Future research could compare the effectiveness of SDT-based internship programmes with other experiential learning approaches, such as service-learning or co-operative education models, to identify best practices and optimal pedagogical designs. (4) Further studies could examine the complex interplay of organisational culture, the quality of mentorship, and external labour market conditions in shaping the outcomes of internship programmes, moving beyond individual psychological factors.

In conclusion, this research contributes to the growing body of evidence supporting the imperative integration of experiential learning into higher education. By prioritizing students' core psychological needs and addressing the pervasive issue of employability, psychology programmes can empower graduates to not only secure roles but to thrive and lead fulfilling careers, thereby addressing the persistent and systemic gap between education and employment in the field.

Acknowledgements

We would like to thank our students who participated in the study and generously shared their experiences. We are also grateful to our colleagues at the School of Human Sciences, University of Greenwich, for their support throughout the research and internship programme.

Author contributions

Oindrila Dutta contributed to the conceptualisation and design of the study, funding acquisition, data curation, formal analysis, and preparation of the original draft. Devanshi Vikamsey contributed to data curation, formal analysis, and review and editing of the manuscript. Nazima Ahmed contributed to data curation. Rebecca Smith contributed to project administration and review and editing of the manuscript. All authors reviewed and approved the final version of the manuscript for submission.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This study was funded by the Institute for Lifecourse Development (ILD)'s Early Career Academic Development Programme at the University of Greenwich.

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Data availability statement

The data supporting the findings of this study are not publicly available due to ethical restrictions.

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