

# EXPLORING THE TRANSITION OF HEALTH WORKERS FROM STUDENTS TO PROFESSIONALS

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*Numerous studies have documented the transition difficulties that health care students experience when they move into paid professional practice. Addressed in this paper are three questions that challenge post-secondary educators. (1) What might a successful transition look like for a “new” health care professional? (2) What individual actions could we, as educators, initiate to promote successful transitions for our students? Should we accept mentoring as an effective strategy to support students’ transition, and if so (3) What might demonstrate effective mentorship? The evidence suggests that the process of transition into professional life for health care workers may be facilitated when post-secondary education experiences include the development of strong professional networks, the provision of supportive learning opportunities, supports for developing self-confidence in their new roles are provided and mentoring continues after graduation.*

The transition experience from student to employed professional is well documented in the literature. Progression upon post-secondary graduation involves the phenomenon of role transition. Role transition has been described as a process rather than a specific event (Barnes, 2015). Transition is satisfying and fulfilling for some individuals; however, others find it challenging and stressful. This rite of passage involves an “emotional reorganisation” that can entail loss, risk, and anxiety, as well as excitement and anticipation of future possibilities (Lucey & Reay, 2000, p. 192). For new health care professionals, negotiating the emergence from post-secondary education to professional life presents challenges. Factors influencing successful transition into professional careers include support and encouragement from peers, parents, educators, and academic institutions; a strong self-concept as a health care professional; and personal coping strategies that underlie self-development and perseverance.

Addressed in this paper are three questions that continue to challenge educators in understanding and supporting students during their transition into professional practice roles. (1) What might a successful transition look like for a “new” health care professional? (2) What individual actions could we, as educators, initiate to promote successful transitions for our students? Finally, if we accept that mentoring is an effective strategy to support students’ transition, (3) What might demonstrate effective mentorship?

## **Background: Providing Context to the Questions**

Transitional definitions vary; however, most authors acknowledge that role transition involves individuals’ behaviours during a passage of change. Transition occurs over time and entails change and adaptation in different spheres of one’s life, for example developmental, personal, relational, situational (occupational), societal, or environmental change (Schumacher &

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Meleis, 1994). Schumacher and Meleis (1994) define role transition as a change in role function and scope of practice. Definitions highlight the increase in personal autonomy (Sullivan-Bent et al., 2010) that accompanies the transition from student to health care professional.

A health care student's transition into professional practice is a time of charged emotion where the graduate leaves the familiar grounds of post-secondary education for the unknown of professional practice. This holds across a diversity of health care professions including nurses (Henderson et al., 2015; Labrague & McEnroe-Petitte, 2018), physicians (Hannan et al., 2018; Moczko et al., 2016), social workers (Tham, 2018), and students from other health care disciplines (Robins et al., 2018). To illustrate, in [Mellor and Gregoric's \(2016\)](#) interviews of graduates from South Australian hospitals, respondents described feelings of limited control over the initial stage of their professional role. Martin et al. (2020) investigated new-graduate physiotherapists' perceptions of their preparedness for work in rural or remote settings. Participants reported 'shock' at the rapid adaptations needed to provide effective service in these settings. The complex clinical demands and unique cultural factors inherent in rural and remote locations were experienced as obstacles to the transition from student to clinician despite overall role satisfaction. Stoikov et al. (2021), in their study, reported that new physiotherapy graduates identified that coping with change in independence and managing expectations of themselves was difficult. This was echoed by Sullivan-Bent et al. (2010) in a study of Canadian nurses. Additionally, they noted a lack of infrastructure, orientation, and that mentorship impeded role transition.

Within the literature, numerous factors contributing to stress and transition shock among health care professionals have been identified. The shock of new experiences is attributed by graduates in part to the academic preparation by post-secondary institutions not matching the reality found in practice. The suggestion that post-secondary preparation of graduates is inadequate is long-standing and is described by [Kramer \(1974\)](#), more recently by Ankers et al. (2018), and Wong et al. (2018) among others. Labrague et al. (2018) in their integrative review of original studies conducted from 2002 through February 2017 examined new nurses' stress, and reported that a significant percentage of newly graduated nurses identified during their initial year of employment, experience of a noteworthy number of challenges and difficulties originating from patient workload, a lack of nursing competence and skills, and the gap between theory and practice. Other factors that could explain transition shock among newly graduated nurses include age, self-efficacy, location of residence, and the number of days off (Kim et al., 2018). Characteristics within an organization that yield significant correlations with experiences of transition shock included one's current unit assigned, desired unit, and the work environment (Kim & Shin, 2020).

Similar findings have been reported for students originating from other health care professions. Monti et al. (2020) explored new residents and their transition to practice and found participants reported difficulties in managing their workload within the allotted time. Participants also conveyed that their academic education neglected administrative skills despite their importance to practice; that contributed to anxiety and frustration during role transition. Synnott et al. 2015 studied physiotherapists who perceived that initial training failed to instil the requisite skills and confidence to successfully address and treat multidimensional patient presentations. In a later, study, Stoikov et. al. (2020) explored physiotherapy students' feelings of being ready for practice. Their participants reported that increased caseload volume and complexity were challenging, and that as students they were typically protected from realistic workloads.

The transition adjustment affects health care organizations as well. The financial costs associated with decreased productivity, rehiring, and retraining due to disengaged newcomers or losing new employees to turnover can impede quality health care delivery and service. As reported by Sullivan-Bent et al. (2010), one-third of the nurse practitioners under study, changed employment upon entry into professional practice. Interprofessional conflict and problems with acceptance of their role were cited as the primary reasons for the change. In brief, there is comprehensive agreement that a transition challenge exists for health care students entering employment post-graduation. This returns the commentary to the three original questions posed.

### **What might a successful transition look like for a “new” health care professional?**

Some researchers have identified that there are no indicators about how to characterize a transition as successful (Sattoe et al., 2017). However, there is evidence that can suggest indicators. Schumacher and Meleis (1994) theoretically identified that indicators of successful transitions are subjective wellbeing, role mastery, and well being of relationships. To illustrate, upon entering a new setting, an individual’s development is enhanced to the extent that valid information, advice, and experience relevant to the setting are made available on a continuing basis (Dunlop, 2017). Consequently, as new graduates gain clinical experience, they tend to attain a corresponding increase in confidence in their roles and professional judgment (Black et al., 2010). This was described by Rose (2018) who wrote that insider status mediated transition to regular employment with the host organization. Ideally, new health care graduates no longer experience the profession as outsiders, or as students, but frame their worldview and make decisions based on the technical knowledge, procedural skills, and sensibilities of professional practice.

Reconstruction of a valued self-identity is essential to successful transition. Professional identity is the concept that describes how we perceive ourselves within our occupational context and how we communicate this to others. Identities are never fixed, as individuals can re-create their identity at any time during their lifetime as personal and professional circumstances change, leading to an altered sense of self. One component of this is self-confidence. Positive self-confidence was highlighted as a positive predictor of successful transition in the open-ended responses of participants in a study by McCombie and Antanavage (2017). Doody et. al. (2012) defined successful transition as being prepared, competent, and having organizational support. Leong and Crossman (2015) describe success as when new nurses adapted and adjusted to the expectations of others and acquired professional and organisational identities. These identities were framed and communicated by managers, co-workers, preceptors, organizations, patients, and family members.

Because the role transition of the new health care professional can be stressful and positive adjustment is an indicator of a successful transition, social support is especially vital to the novice employee during the transitional period. This assertion was supported by Ghosh and Fouad (2017), who wrote that social support is an essential component of successful entry into the labour market. Sullivan-Bentz et al. (2015) found that familiarity of colleagues and employers with the nurse practitioner’s role and scope of practice is essential to successful role transition. While there is no evidence directly related to the impact of a sense of meaning on a successful transition experience, it is suggested that those with strong personal gratification and motivation in the value of their work are more likely to transition successfully. However, until it

is understood how to evaluate this process as successful, it not easy to move post-secondary educational priorities forward.

### **What individual actions could we, as educators, initiate to promote successful transitions for our students?**

Theory is the basis for understanding the reality of professional health care practice, it would seem reasonable to assume that the content studied in the classroom should correlate to what the student experiences in paid professional employment. Sparacino (2016) reports that program rigor enabled nursing graduates to manage stressful situations as new health care professionals. New professionals in this study also noted educational programs that promoted communicating with professional nuances, adhering to policies, and acting professionally, enabled a smoother role transition. When a gap is identified between theory and practice, efforts should be made to reduce it. Post-secondary educators must be pivotal in this process of reducing the theory-practice gap, creating relevance for students, helping them apply theoretical knowledge to practice situations, and bridging the ideal with the real. Classroom and clinical educators can use current situations, experienced by students, as critical incidents to encourage students' ability to link practice with theory (Berndtsson et al., 2020).

Educators in classroom and clinical settings have a stake in ensuring new graduates' success, and can play different roles in the transition. Included in this is helping students to conceptualize their roles and scope of practice, and reduce role ambiguity (Ares, 2018). Adequately preparing health care students for facing unknown patient situations and interdisciplinary communication helps bridges the gap between classroom and employment. Educators might ensure consistent preceptors and extended orientations for new graduates to promote a successful transition. These strategies would provide long-term opportunities for transitioning health care professionals to develop clinical judgment and practice skills, debrief, and network with their new colleagues. Numerous studies relating to structured workplace orientation programs identify their importance in influencing job satisfaction (Tabvuma et al., 2015) and safety in the new workplace (Curcuruto et al., 2016). Both elements contribute to a successful transition.

Mentoring is presented within the literature as an effective strategy for health care educators in reducing the stressors associated with role transition. Johnson (2016) defines a mentor as "a personal and reciprocal relationship in that a more experienced (usually older) faculty member acts as a guide, role model, teacher, and sponsor of a less experienced (usually younger) student or faculty member. A mentor provides the mentee with knowledge, advice, counsel, challenge, and support in the mentee's pursuit of becoming a full member of a particular profession" (p. 23). This was recognized by Moran and Nairn (2017) who promote the investment in mentorship and the implied supportive skills to help new staff undertaking transition of role. Grant and Marsden (1988) note after observing junior doctors graduating, those who engaged with mentorship improved clinical skills and abilities much more rapidly than those without it. It is recognized that mentorship is a crucial element in assisting health care professionals to achieve an adequate level of clinical experience.

McCombie and Antanavage (2017) examine the transition from student to practicing occupational therapist over the duration of one's first year of professional employment. Surveys mailed to 500 occupational therapists randomly selected from membership in the American Occupational Therapy Association, resulted in 202 completed questionnaires. Respondents

indicated that having a mentor was related to high job satisfaction and good clinical fit. Unfortunately, there were inconsistencies in provision of mentors. When queried as to major obstacles to a smooth transition, it is unsurprising that not having a mentor was among the primary responses reported.

The role of the mentor as a form of support is essential, as they guide new graduates in their professional growth to become independent practitioners (Kaihlanen et al., 2013). The assistance of a mentor promotes the new graduate's confidence as an independent professional, through facilitating improved skills and behaviours required to provide quality health care to patients. Mentorship has a major impact on new graduates' experiences of acceptance and belonging. In addition, the mentor has a role in introducing graduates to new demands such as interdisciplinary teamworking, and to remind them that they are at the beginning of their working lives.

### **What might demonstrate effective mentorship?**

As post-secondary educators, if we accept that effective mentorship facilitates successful transition to professional employment for health care students then the question that needs to be asked is: What might demonstrate effective mentorship? An effective mentor:

- is someone who can challenge and support a mentee and not judge them,
- offers constructive feedback in an honest and candor manner, and
- is willing to commit the time needed to build and maintain a productive relationship.

Communication, passion for exchanging knowledge, displaying mutual respect, and demonstrating behaviours of a role model are vital elements to mentorship (Eller et al., 2014). Jack et al. (2018) acknowledged that mentorship has been conducted in a relaxed, unstructured fashion, and this lack of structure can have detrimental effects on the mentorship experience. La Fleur and White (2010) discussed whether mentorship should be undertaken from the same professional background or whether having a mentor from a different background is more beneficial. Rohatinsky and Ferguson (2013) suggest that different clinical backgrounds could provide a tremendous positive advantage to explore and develop broader interprofessional knowledge, and opportunity to demonstrate role model behaviours for interprofessional working.

Do students in specific health care professions require different types of mentors? Little evidence is available in the literature to answer this question directly. There is substantive literature to demonstrate the influence of gender and culture on mentoring relationships, so some inferences might be made. Aikens et al. (2017) report that men and underrepresented minority students are significantly more likely to report a direct tie to their faculty mentors than women, white, and Asian students. In their report for the World Health Organization, Boniol et al. (2019) report that an estimated 67% of the health workforce in the 104 countries studied were female. They found systematic differences in gender distribution by occupation across the world.

The organisational literature identifies that supposedly gender-neutral structures, practices, and cultures within organisations are gendered, founded on unstated masculine specific norms (Nentwich & Kelan, 2014). Welsh and Diehn (2018) report that gender was associated with the way protégés viewed a mentoring relationship and their reports of mentoring received. When identical relationships were described, women were more likely than men to identify a senior colleague as a mentor, and protégés in heterogeneous gender mentoring relationships reported more mentoring received than those in homogeneous gender relationships. It appears

that mentoring needs to be considered from a gender lens and from a cultural one. Byars-Winston, et al. (2020) report that mentees and mentors whose racial/ethnic identities were more personally salient may be more motivated to engage with race/ethnicity in their mentoring relationships than those whose identities were less salient. This possibility was drawn from an African-American male mentee in their study sample, who stated “it was easier, it was easy to relate” to his non-White mentor, because the mentor has faced discrimination. The participant referenced the shared experience of marginalization as the matching factor even though his and his mentor’s racial/ethnic backgrounds did not perfectly align.

On post-secondary education campuses, there is diversity in the student population, faculty members, and support staff. Understanding the individual characteristics of the population to be served is central to understanding both mentoring needs and strategies for successful mentorship. Researchers have demonstrated the benefits of mentorship for faculty members’ professional development, balancing of their professional and personal demands, and research productivity. For students, different populations (e.g., undergraduate, graduate, male and female, non-binary, and different ethnic communities) may vary in their mentor and mentee needs.

Demonstrating mentorship extends beyond educators to other members of post-secondary institutions. Academic and student advisors should ask about the type of support graduating health care students need and receive. Asking about sources of social support can be beneficial in determining if more support is needed in specific areas. For example, graduating students may present to advisors indicating that they are not receiving enough support from faculty. The advisor can then work with them to identify how faculty members can be supportive of students in making a successful transition.

## Conclusion

It can be challenging for health care students to transition successfully into their professional roles. There are numerous variables that can influence their transition experience, such as their new work environment, availability of support, and the presence of long-term mentors. However, there are factors that can positively support the transition experience. It is imperative that post-secondary educators better facilitate the transition from student life to work life and mitigate the challenges associated with the student-to-paid employment transition. As post-secondary educators, there is much that we can do to build and strengthen the bridges between health care student and professional. We have made a case for a keen awareness of the value of mentoring in role transitioning a health care student to the employed professional and encourage the development of these long-term mentoring relationships.

## References

- Aikens, M. L., Robertson, M. M., Sadselia, S., Watkins, K., Evans, M., Runyon, C. R., Eby, L.T. & Dolan, E. L. (2017). Race and gender differences in undergraduate research mentoring structures and research outcomes. *CBE—Life Sciences Education*, 16(2), ar34. <https://www.lifescied.org/doi/pdf/10.1187/cbe.16-07-0211>
- Ankers, M. D., Barton, C. A., & Parry, Y. K. (2018). A phenomenological exploration of graduate nurse transition to professional practice within a transition to practice program. *Collegian*, 25(3), 319-325. <https://doi.org/10.1016/j.colegn.2017.09.002>

- Ares, T. (2018). Role transition after clinical nurse specialist education. *Clinical Nurse Specialist*, 32(2), 71–80. doi:10.1097/NUR.0000000000000357
- Barnes, H. (2015). Nurse practitioner role transition: A concept analysis. *Nursing Forum*, 50(3), 137-146.  
[https://onlinelibrary.wiley.com/doi/pdf/10.1111/nuf.12078?casa\\_token=TNCpkgNwXGgAAAAA:CE4TV-KYWgtRf394E-\\_QY4aa3e2AC1QtmQckT1jqv9mb6W-AiMihg6saGf1A\\_RfV7EAwyKo9eCiKNyKz](https://onlinelibrary.wiley.com/doi/pdf/10.1111/nuf.12078?casa_token=TNCpkgNwXGgAAAAA:CE4TV-KYWgtRf394E-_QY4aa3e2AC1QtmQckT1jqv9mb6W-AiMihg6saGf1A_RfV7EAwyKo9eCiKNyKz)
- Berndtsson, I., Dahlborg, E., & Pennbrant, S. (2020). Work-integrated learning as a pedagogical tool to integrate theory and practice in nursing education—An integrative literature review. *Nurse Education in Practice*, 42, 102685. <https://doi.org/10.1016/j.nepr.2019.102685>
- Black, L.L., Jensen, G.M., Mostrom, E., Perkins, J., Titzline, P.D., Hayward, L., & Blackmer, B. (2010). The first year of practice: An investigation of the professional learning and development of promising novice physical therapists. *Physical Therapy*, 90(12), 1758-1773.  
[https://www.academia.edu/19376308/The\\_First\\_Year\\_of\\_Practice\\_An\\_Investigation\\_of\\_the\\_Professional\\_Learning\\_and\\_Development\\_of\\_Promising\\_Novice\\_Physical\\_Therapists](https://www.academia.edu/19376308/The_First_Year_of_Practice_An_Investigation_of_the_Professional_Learning_and_Development_of_Promising_Novice_Physical_Therapists)
- Boniol, M., McIsaac, M., Xu, L., Wuliji, T., Diallo, K., & Campbell, J. (2019). *Gender equity in the health workforce: Analysis of 104 countries* (No. WHO/HIS/HWF/Gender/WP1/2019.1). World Health Organization.  
<https://apps.who.int/iris/bitstream/handle/10665/311314/WHO-HIS-HWF-Gender-WP1-2019.1-eng.pdf>
- Byars-Winston, A., Leverett, P., Benbow, R. J., Pfund, C., Thayer-Hart, N., & Branchaw, J. (2020). Race and ethnicity in biology research mentoring relationships. *Journal of Diversity in Higher Education*, 13(3), 240. <https://dx.doi.org/10.1037%2Fdhe0000106>
- Curcuruto, M., Mearns, K. J., & Mariani, M. G. (2016). Proactive role orientation toward workplace safety: Psychological dimensions, nomological network and external validity. *Safety Science*, 87, 144 – 155. <https://doi.org/10.1016/j.ssci.2016.03.007>
- Ebrahimi, H., Hassankhani, H., Negarandeh, R., Azizi, A., & Gillespie, M. (2016). Barriers to support for new graduated nurses in clinical settings: A qualitative study. *Nurse Education Today*, 37, 184-188. <https://doi.org/10.1016/j.nedt.2015.11.008>
- Forbes, R., & Ingram, M. (2019). New-graduate physiotherapists' readiness for practice and experiences of managing chronic pain: A qualitative study. *Physiotherapy Theory and Practice*. 1,1-8. <https://doi.org/10.1080/09593985.2019.1692394>
- Doody, O., Tuohy, D., & Deasy, C. (2012). Final-year student nurses' perceptions of role transition. *British Journal of Nursing*, 21(11), 684–688.  
<https://doi.org/10.12968/bjon.2012.21.11.684>
- Dunlop AW. (2017). Transitions as a tool for change. In N. Ballam, B. Perry, & A. Garpelin, A. (Eds.). *Pedagogies of educational transitions. International perspectives on early childhood education and development*, 16. Springer. [https://doi.org/10.1007/978-3-319-43118-5\\_16](https://doi.org/10.1007/978-3-319-43118-5_16)
- Ghosh, A., & Fouad, N. A. (2017). Career adaptability and social support among graduating college seniors. *The Career Development Quarterly*, 65(3), 278-283.  
<https://doi:10.1002/cdq.12098>

- Hannan, E., Breslin, N., Doherty, E., McGreal, M., Moneley, D., & Offiah, G. (2018). Burnout and stress amongst interns in Irish hospitals: contributing factors and potential solutions. *Irish Journal of Medical Science*, 187(2), 301-307. <https://doi.org/10.1007/s11845-017-1688-7>
- Kaihlanen, A. M., Lakanmaa, R. L., & Salminen, L. (2013). The transition from nursing student to registered nurse: The mentor's possibilities to act as a supporter. *Nurse Education in Practice*, 13(5), 418-422. <https://doi.org/10.1016/j.nepr.2013.01.001>
- Kim, J. H., & Shin, H. S. (2020). Exploring barriers and facilitators for successful transition in new graduate nurses: A mixed methods study. *Journal of Professional Nursing*, 36(6), 560-568. <https://doi.org/10.1016/j.profnurs.2020.08.006>
- Kim, E. Y., Yeo, J. H., Park, H., Sin, K. M., & Jones, C. B. (2018). Psychometric evaluation of the Environmental Reality Shock-Related Issues and Concerns instrument for newly graduated nurses. *Nurse Education Today*, 61, 106–111. <https://doi.org/10.1016/j.nedt.2017.11.003>
- Kramer, M. (1974). *Reality shock; Why nurses leave nursing*. Mosby.
- Labrague, L. J., & McEnroe-Petitte, D. M. (2018). Job stress in new nurses during the transition period: An integrative review. *International Nursing Review*, 65(4), 491-504. <https://doi.org/10.1111/inr.12425>
- Leong, Y. M. J., & Crossman, J. (2015). New nurse transition: Success through aligning multiple identities. *Journal of Health Organization and Management*, 29(7), 1098 -1114. <https://doi.org/10.1108/JHOM-02-2014-0038>
- Lucey, H., & Reay, D. (2000). Identities in transition: Anxiety and excitement in the move to secondary school. *Oxford Review of Education*, 26(2), 191-205. <https://doi.org/10.1080/713688522>
- Martin, R., Mandrusiak, A., Lu, A., & Forbes, R. (2020). New-graduate physiotherapists' perceptions of their preparedness for rural practice. *Australian Journal of Rural Health*, 28(5), 443-452. <https://doi.org/10.1111/ajr.12669>
- McCombie, R. P., & Antanavage, M. E. (2017). Transitioning from occupational therapy student to practicing occupational therapist: First year of employment. *Occupational Therapy in Health Care*, 31(2), 126-142 <https://doi.org/10.1080/07380577.2017.1307480>
- Mellor, P., & Gregoric, C. (2016). Ways of being: Preparing nursing students for transition to professional practice. *The Journal of Continuing Education in Nursing*, 47(7), 330-340. <https://doi.org/10.3928/00220124-20160616-10>
- Moczko, T. R., Bugaj, T. J., Herzog, W., & Nikendei, C. (2016). Perceived stress at transition to workplace: A qualitative interview study exploring final-year medical students' needs. *Advances in Medical Education and Practice*, 7, 15. <https://dx.doi.org/10.2147%2FAMEP.S94105>
- Monti, M., Brunet, L., & Michaud, P. A. (2020). Transition to postgraduate practice: Perceptions of preparedness and experience of the daily work of junior residents. *Swiss Medical Weekly*, 150(4748). <https://doi.org/10.4414/smw.2020.20370>
- Nentwich, J. C., & Kelan, E. K. (2014). Towards a topology of 'doing gender': An analysis of empirical research and its challenges. *Gender, Work & Organization*, 21(2), 121-134. <https://doi.org/10.1111/gwao.12025>
- Robins, T. G., Roberts, R. M., & Sarris, A. (2018). The role of student burnout in predicting future burnout: Exploring the transition from post-secondary to the workplace. *Higher*



- Education Research & Development*, 37(1), 115-130.  
<https://doi.org/10.1080/07294360.2017.1344827>
- Rose, P. S. (2018). The intern to employee career transition: An outsiders perception of insider status. *Journal of Career Development*, 45(6), 566-579.  
<https://doi.org/10.1177%2F0894845317725192>
- Rush, K. L., Adamack, M., Gordon, J., & Janke, R. (2014). New graduate nurse transition programs: Relationships with bullying and access to support. *Contemporary Nurse*, 48(2), 219-228. <https://doi.org/10.1080/10376178.2014.11081944>
- Sattoe, J. N. T., Hilberink, S. R., & Van Staa, A. (2017). How to define successful transition? An exploration of consensus indicators and outcomes in young adults with chronic conditions. *Child: Care, Health and Development*, 43(5), 768-773.  
<https://doi.org/10.1111/cch.12436>
- Schumacher, K. L., & Meleis, A. L. (1994). Transitions: A central concept in nursing. *Image: The Journal of Nursing Scholarship*, 26(2), 119-127. <https://doi.org/10.1111/j.1547-5069.1994.tb00929.x>
- Sparacino, L. L., (2016). Faculty's role in assisting new graduate nurses' adjustment to practice. *Open Nursing*, 2, 1-9. <https://journals.sagepub.com/doi/pdf/10.1177/2377960816635182>
- Stoikov, S., Gooding, M., Shardlow, K., Maxwell, L., Butler, J., & Kuys, S. (2021). Changes in direct patient care from physiotherapy student to new graduate. *Physiotherapy Theory and Practice*, 37(2), 323-330. <https://doi.org/10.1080/09593985.2019.1628138>
- Stoikov, S., Gooding, M., Shardlow, K., Maxwell, L., Butler, J., & Kuys, S. (2020). The transition from physiotherapy student to new graduate: Are they prepared? *Physiotherapy Theory and Practice*, 1-11. <https://doi.org/10.1080/09593985.2020.1744206>
- Sullivan-Bentz, M., Humbert, J., Cragg, B., Legault, F., Laflamme, C., Bailey, P. H., & Doucette, S. (2010). Supporting primary health care nurse practitioners' transition to practice. *Canadian Family Physician*, 56(11), 1176-1182.  
<https://www.cfp.ca/content/cfp/56/11/1176.full.pdf>
- Synnott, A., O'Keeffe, M., Bunzli, S., Dankaerts, W., O'Sullivan, P., & O'Sullivan, K. (2015). Physiotherapists may stigmatise or feel unprepared to treat people with low back pain and psychosocial factors that influence recovery: A systematic review. *Journal of Physiotherapy*. 61, 68-76. <https://doi.org/10.1016/j.jphys.2015.02.016>
- Tabvuma, V., Georgellis, Y., & Lange, T. (2015). Orientation training and job satisfaction: A sector and gender analysis. *Human Resource Management*, 54, 303-321.  
<https://doi.org/10.1002/hrm.21650>
- Tham, P. (2018). A professional role in transition: Swedish child welfare social workers' descriptions of their work in 2003 and 2014. *British Journal of Social Work*, 48(2), 449-467. <https://doi.org/10.1093/bjsw/bcx016>
- Welsh, E. T., & Diehn, E. W. (2018). Mentoring and gender: Perception is not reality. *Career Development International*. <https://www.emerald.com/insight/content/doi/10.1108/CDI-11-2017-0198/full/html>
- Wong, S. W. J., Che, W. S. W., Cheng, M. T. C., Cheung, C. K., Cheung, T. Y. J., Lee, K. Y., ... & Yip, S. L. (2018). Challenges of fresh nursing graduates during their transition period. *Journal of Nursing Education and Practice*, 8(6), 30-37.  
<https://doi.org/10.5430/jnep.v8n6p30>