

The Relationship between Perceptions of the Work Integrated Learning Environment, Transition to Practice Self-Efficacy and Professional Fit. The Moderating Role of Individual Differences.

DRAFT

### Abstract

Researchers have proposed that both environmental and individual differences influence the effectiveness of work integrated learning (Billett, 2007; Bell & Straw, 1989), yet quantitative research investigating this proposition is limited. Therefore, this study investigated how students' perceptions of the work integrated learning support (i.e., social and structured support), and individual differences in proactive behaviour (i.e., positive framing and task negotiation), influenced transition to practice self-efficacy and professional fit. Longitudinal structural equation modelling (SEM) was conducted on a sample of final year nursing students (N=233) using data collected prior to, and following their final placement. The researchers found that students' perception of the learning environment (viz. social and structured support) was positively related to professional fit and transition to practice self-efficacy. However, further analysis revealed that the relationship between work integrated learning support (viz. structured and social support) was moderated by the students' levels of task negotiation and positive framing. For example, social support predicted transition to practice self-efficacy, but only at low levels of positive framing. Taken together, the results demonstrated that both individual and environmental factors are important in the prediction of work integrated learning outcomes. Implications for theory and practice are discussed.

The Relationship between Perceptions of the Work Integrated Learning Environment, Transition to Practice Self-Efficacy, and Professional Fit. The Moderating Role of Individual Differences.

Work integrated learning (WIL) provides students' with access to *real-world* experiences, and allows for the application of theory to practice (Allen, 2007; Billett, 2007, Calway & Murphy, 2007). While WIL has been found to improve students' confidence (Dressler & Keeling, 2004), knowledge of the discipline (Eames, 2000), and integration with the profession (Wilson, 1989), limited research has focused on the dual effects of individual and environmental antecedents on WIL outcomes. Therefore, the current study proposes that transition to practice self-efficacy, and professional fit are important outcomes of WIL, and that individual (viz. task negotiation and positive framing) and environmental differences (viz. social and structured support) are the key antecedents (Billett, 2007; Bell & Straw, 1989; Jones, 1986; Ashford & Black, 1996; Kim, Cable & Kim, 2005; Crant, 2000). The aim of this study is to investigate the proposed relationships, which are based on a critique of the relevant theory and empirical research, using structural equation modelling.

To achieve this aim, the following paper is structured around four objectives. First, a review of the theory and research pertaining to transition to practice self-efficacy and professional fit will be presented. These factors are argued to be important outcomes of WIL, which refer to students' enculturation with the profession, and their confidence to make the transition to practice. Secondly, an integrative model will be presented that provides a schematic representation of the relationships between environmental (viz. social and structured support) and individual (viz. positive framing and task negotiation) differences, transition to practice self-efficacy and professional fit. Third, a short review of

the theoretical and empirical research that supports these relationships will be provided.

Finally, the integrative model is then investigated using structural equation modelling, and implications for theory and practice are discussed.

### *Transition to Practice Self Efficacy*

Transition to practice self-efficacy refers to the perceptions of competence across the skills and abilities that are important for university graduates entering the workforce. This construct has considerable utility in explaining students' performance following undergraduate training (Bandura, 1997; Saks, 1995). For instance, Gist and Mitchell (1992) argued that those with high self-efficacy persist and overcome challenges within their environment. Furthermore, those with high levels of self-efficacy exert effort to proactively cope with stress, persevere through setbacks, and execute the required action to perform effectively during the transition to practice. A basic tenet of the theory is that 'vicarious learning' and 'enactive mastery' improves self-efficacy beliefs (Bandura, 1997). Broadly, there are two reasons why WIL provides an opportunity for both of these processes to occur. First, vicarious learning is based on the chances for the student to observe, and model, the behaviours of other professionals, which is considered to be a main component of WIL placements. Furthermore, through providing opportunities for the application of theory and skills to practice, it can be argued that WIL placements facilitate enactive mastery. For these reasons, the quality of the WIL experience helps to shape efficacy beliefs.

Empirical research has supported the theoretical propositions underlying self-efficacy. For example, Saks (1995) conducted a longitudinal study investigating the relationship between the training of accountants and their adjustment to the workplace following graduation. The results of the study identified that the relationship between

training and ability to cope was mediated by self-efficacy. In a similar study, Heuven, Bakker, Schaufel & Huisman, (2006) found that self-efficacy moderated the relationship between stressful encounters at work and burnout. Specifically, those who had high self-efficacy were better able to cope with the demands of work, thus reducing the chance of burnout. Collectively, this pattern of results suggests that self-efficacy is an important outcome of WIL, through explaining how early experiences affect future performance.

### *Professional Fit*

The construct of professional fit describes the extent to which an individual perceives match or congruence with the culture of the profession, and can be argued as an important outcome of WIL. Broadly, “culture is the collective programming of mind which distinguishes members of one category of people from another” (Hofstede, 1984, pp. 51). This ‘programming of mind’ is governed by its own, unique set of norms, values, and goals, which guide day-to-day interactions, attitudes, and behaviours within the profession (Schien, 1971). These guiding principles typically reside under the surface of observable behaviour, thus one of the challenges for student is to uncover these principals, so that they can behave consistently, and become accepted, by the group. Researchers have argued that uncovering the factors that constitute professional culture occurs through social and symbolic interactions with members of the group (Crant, 2000; Reichers, 1987). Given that WIL provides access to these social exchanges, it is argued that the quality of the experience can influence the students’ perceptions of profession fit.

Empirical research has supported the importance of cultural fit across several contexts. A recent meta-analysis conducted by Kristof-Brown, Zimmeman and Johnson (2005) found that newcomers’ identification with the culture of the organisation (viz.

person-organisation fit) resulted in an increased level of attraction, commitment, and intentions to remain with the organisation. These results have been extended to the professional setting. For example, Lai (2008) demonstrated the importance of fit with the culture of the profession. One year following graduation, the scholar compared groups of nursing professionals who intended on staying with the profession, with those who did not. The scholar found a significant difference between both groups based upon the degree to which the individuals identified with the values of the profession. Although professional fit was not studied directly, this research demonstrated the importance of identifying with the culture of the profession, and its relationship to commitment and turnover. Taken together, these results identify professional fit as an important outcome for the longer-term retention and commitment of students to the occupation.

*The antecedents of professional fit and transition to practice self-efficacy*

The study of the antecedents of professional fit and transition to practice self-efficacy may offer additional means of guiding practices that help to improve these outcomes. Yet a paucity of research exists that attempts to investigate the antecedents within the WIL context. Therefore, the second aim of this study was to propose an integrative framework that identifies the causes of professional fit and transition to practice self-efficacy, which is depicted in figure 1.

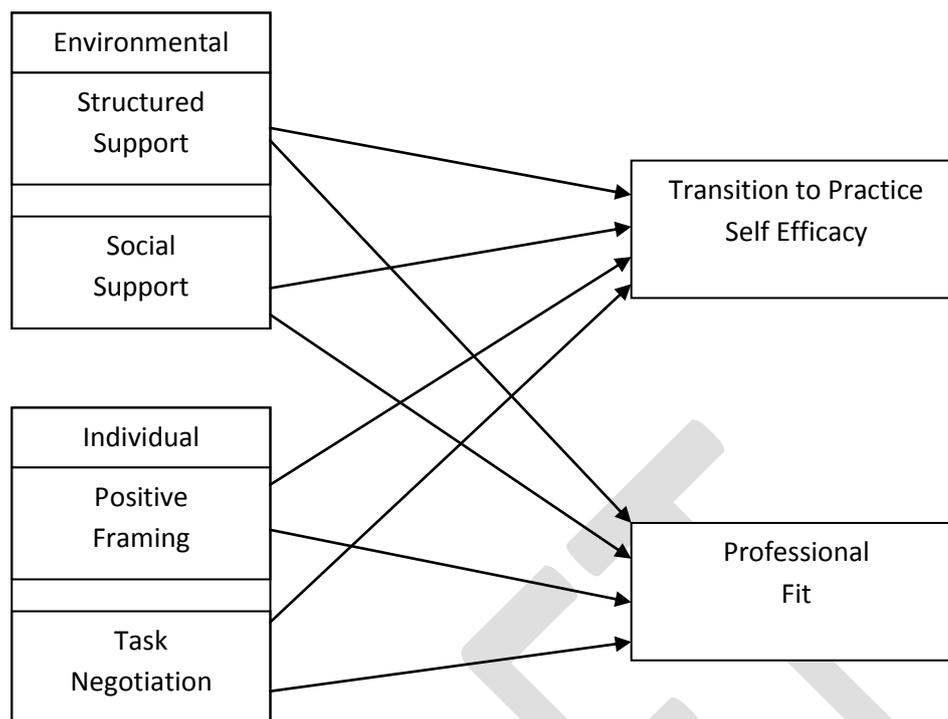


Figure 1. The antecedents of professional fit and transition to practice self-efficacy.

Two broad categories of antecedents are included in the model depicted in figure 1 (viz. individual and environmental differences). This is consistent with a common thread within the WIL and industrial/organisational psychology literature that suggests that both individual and environmental factors influence outcomes (Billett, 2007; Bell & Straw, 1989; Jones, 1986; Ashford & Black, 1996; Kim, Cable & Kim, 2005; Crant, 2000). The first set depicts contextual factors of social and structured support, which have been proposed to influence the quality of the learning experience. The second set of individual differences variables include task negotiation and positive framing, which have been identified as two proactive behaviours that may influence students' WIL experience. The following section of this review considers the theoretical and empirical support for these components of the model, including the proposed relationships.

### *Workplace Entry*

When a student enters the workplace, they move from a structured university setting characterised by established routines, to one that is ambiguous and unpredictable (Van Maanen & Schien, 1979; Louis, 1980). This transition coincides with a reality shock (Louis, 1980), which is based upon “the feelings of loneliness and isolation that are associated initially with a new location in an organization as well as the performance anxieties a person may have when assuming new duties” (Van Maanen & Schein, 1979). On the basis that reality shock predicts newcomer stress (Fisher, 1985; Wanous, 1992), it can be argued that this may have a negative impact on WIL outcomes. For example, one basic proposition is that stress has a negative impact on learning performance (Le Pine, Le Pine, & Jackson, 2004), thus reducing the effectiveness of WIL to help improve transition to practice self-efficacy and professional fit. Given that the negative impact of ambiguity, shock and stress can be reduced by workplace support (i.e., social and structured support), and individual differences in proactive behaviour (i.e., positive framing and task negotiation), it is important to extend these investigations to the WIL setting. Therefore, the following section details the factors proposed to reduce reality shock, and improve transition to practice self-efficacy and professional fit for students’ within the WIL context.

### *Social Support*

Social support refers to the workplace’s attempt to affirm the identity of the newcomer (Van Maanen & Schien, 1979), and provide them with help, guidance, and encouragement via access to established organisational insiders (Davey, 2003; Henderson, Heel, Twentyman & Lloyd, 2006; Fisher, 1985). A plethora of empirical research has demonstrated that social support is beneficial for newcomers. For example, early research

conducted by Fisher (1985) found that social support helped to reduce stress. More recently, Dixon, Turner, Cunningham, Sagas and Kent (2005) found a significant relationship between social support and organisational commitment ( $r = .53$ ) for a group of interns, and Lubbers, Loughlin and Zweig (2005) found that workplace conflict had an adverse impact on self-efficacy. Collectively, this pattern of results suggests that social support helps to lower stress, and improve newcomer adjustment. Therefore, through stress and ambiguity reduction, it can be argued that a supportive WIL environment helps students to perform their tasks, build their skills, and integrate with the professional community. Thus, we predicted that social support would be positively related to transition to practice self-efficacy and professional fit.

### *Structured Support*

Structured support refers to a systematic, planned set of activities that are designed to facilitate learning through exposing students to meaningful work practices (Kim, et al., 2005). Again, a plethora empirical evidence has supported the utility of structuring newcomers early work experiences to facilitate learning. For example, Allen and Peach (2007) found that one of the main frustrations for WIL students was a lack of direction and task clarity. Similarly, Dixon et al. (2007) found that providing students with challenging tasks to build skills improved their level of commitment ( $r = .65$ ). In addition, Gruman, Saks and Zweig (2006) found that a structured internship was significantly correlated with self-efficacy ( $r = .19$ ), role clarity ( $r = .61$ ), social integration ( $r = .35$ ), and person-job fit ( $r = .42$ ). These findings can be understood in terms of a broader theoretical argument suggesting that structured support fosters enactive mastery and vicarious learning (Bandura, 1997), thus improving WIL outcomes. Therefore, through improving students learning

performance, we predicted that structured support is a significant predictor of transition to practice self-efficacy and professional fit.

### *Positive Framing*

The construct of positive framing may have utility in explaining WIL outcomes. A central feature of positive framing, as the name indicates, is that individuals' differ in terms of the cognitive frame they place on events (Ashford & Black, 1996; Kim, et al., 2005). Ashford and Black (1996) suggested that positive framing occurs when an individual explicitly attempts to alter their understanding of a situation, through changing the way that they interpret it. Kim et al. (2005) argued that people who engage in positive framing see challenges in a favourable light, and interpret the environment as supportive rather than antagonistic. In contrast, those who may interpret events in a more negative fashion, may experience greater levels of stress and anxiety, and may have trouble overcoming the initial reality shock that occurs upon entry into a new work environment. Taken together, this theory has considerable implications for the study of the WIL, as it identifies that students are not passive within the workplace, but can choose to interpret events in way that influences their overall experience.

Indeed, empirical research has demonstrated that positive framing predicts work related outcomes. For instance, Wanberg and Kammeyer-Mueller (2000) conducted a three wave longitudinal study, which investigated the relationship between positive framing and social integration. Results from the study identified that positive framing predicted higher levels of social integration ( $r = .30$ ), and was negatively related to turnover ( $r = -.26$ ). Similarly, Ashford and Black (1996) found that positive framing increased job satisfaction and job performance ( $r = .39$  and  $r = .40$  respectively). Taken together, these results

identified that positive framing predicts newcomer adjustment. Within the context of WIL, it can be argued that students' who use positive framing will make the most of their learning experiences, and through a more optimistic cognitive frame, may readily overcome the reality shock of organisational entry. Therefore, we predicted that positive framing would increase transition to practice self-efficacy and professional fit.

### *Task Negotiation*

The construct of task negotiation describes the extent to which an individual attempts to shape their own learning experience through seeking out projects or activities within the workplace. In this regard, task negotiation is a behavioural self-management strategy where individuals explicitly attempt to alter their environment. One basic proposition underlying task negotiation is desire for control (Ashforth & Black, 1996). Theoretically, those with a higher desire for control, will attempt to negotiate WIL activities that create opportunities congruent with their needs (Dawis & Lofquist, 1978; Ashforth & Black, 1996). Through establishing these activities, this process helps the student to overcome stress and ambiguity during the entry process. Overall, the theory describes that students do not passively accept tasks, but are active agents in shaping their learning experience. Therefore, task negotiation may offer additional insights into the effectiveness of WIL, through demonstrating that students who shape their experience can also shape the outcomes.

Indeed, empirical research supports the role of task negotiation in predicting workplace outcomes. For instance, Ashford and Black (1996) found that those who used task negotiation to modify their roles within the workplace had higher levels of job satisfaction ( $r = .23$ ). Furthermore, Gruman, Saks and Zweig (2006) found a significant

correlation between task negotiation and social integration ( $r = .24$ ). In addition, Wong and Coll (2001) provided evidence that students make significant progress towards learning outcomes when they play an active role in negotiating their activities. Similarly, results from a qualitative case study conducted by Beard and Coll (2001) identified that negotiating mutually beneficial WIL activities contributed to an effective learning experience.

Collectively, this research identifies that task negotiation is important for both social integration and skill development, which presents a clear line of argument regarding the relationship with the outcomes investigated within this study. Certainly, transition to practice self-efficacy and professional fit could be enhanced through the student's attempts towards reducing ambiguity within the learning environment, and by creating their own 'enactive mastery' experiences. Also, the student's transactional experiences with other professionals may provide them with additional insights into the culture of the profession. Thus, we predicted that task negotiation would be positively related to professional fit and transition to practice self-efficacy.

#### *Methodological Considerations to Model Testing*

There are three methodological considerations to be addressed in order to investigate the proposed relationships. First, much of the research within the WIL literature is qualitative, and while this offers benefits, it does not allow for a rigorous examination of the theoretical propositions presented earlier. Therefore, we used structural equation modelling (SEM) to investigate the model depicted in figure 1 (Kline, 1998). Second, the quantitative research reviewed is typically conducted at a single time point, which represents a dearth of longitudinal investigations. This presents as a limitation, because this design does not allow for the statistical control of students' perceptions prior to

commencing the WIL placement. Therefore, we collected data on the outcome variables (i.e., professional fit and transition to practice self-efficacy) both prior to, and following, students' WIL placement. This allowed us to model the autoregressive effects of pre WIL placement attitudes, which provided a clear representation of the pattern of influences within the model (McArdle, 2009). Finally, one of our aims was to investigate the moderated effects, which is based on an exploratory investigation into how individual and environmental variables interact to influence the proposed outcomes. For example, a significant interaction term may identify that social support influences transition to practice self-efficacy, but only at low levels of positive framing. Thus, we calculated cross product interaction terms and used hierarchical regression to investigate moderation (Frazier, Tix, & Barron, 2004). Collectively, our approach to model testing provided a strong test of the theoretically proposed relationships.

In summary, the purpose of the present study was to investigate the relationship between environmental (i.e., social and structured support), and individual differences (i.e., positive framing and task negotiation) with transition to practice self-efficacy and professional fit. We proposed that both environmental and individual difference variables are important in the prediction of transition to practice self-efficacy and professional fit for students of WIL.

### *Method*

#### *Participants*

Participants comprised third year bachelor of nursing undergraduate students from nine Australian universities (N = 242). Data was collected from students prior to, and following their final placement. This sample comprised 15 (6.2%) males, and 226 (93.4%) females. Age for the respondents ranged from 130 participants (53.7%) in the 18-25 group,

46 participants (19.0%) for the 26-34 group, 53 participants (21.9%) for the 35-50 group, and 12 participants (5.0%) for the 50+ group. Participant attrition translated to a 62.5% response at the final data collection point.

### *Professional fit*

A four item measure of professional fit was designed for this research program. Each item reflected subjective fit with values or goals of the profession. These items include, “to what extent do you feel like you fit with the nursing profession at large,” “to what extent do you identify with the values of the nursing profession,” “to what extent do your goals fit within the nursing profession,” “to what extent do you feel that the nursing profession represents your own personal values.” The four item measure was calibrated over a six point scale ranging from (1) ‘to a very little extent’ to (6) ‘to a very large extent’. For the current study, the alpha reliability estimate was acceptable ( $\alpha = .90$ ) and the adjusted reliability estimate based on maximally weighted factor scores was also supportive of the scales consistency ( $r_c = .89$ ). A multifactor confirmatory factor analysis was conducted and provided evidence of the scales convergent and discriminant validity from measures of person-organisation fit and person-job fit ( $\chi^2_{(74)} = 117.11, p > 0.05, TLI = .99, CFI = .98, RMSEA = .03$ ). Goodness of fit statistics also supported measurement invariance ( $\chi^2_{(15)} = 23.75, p > 0.05, TLI = .99, CFI = .98, RMSEA = .04$ ).

### *Transition to practice self-efficacy*

A transition to practice self-efficacy scale could not be located within the literature. Therefore, a scale was developed for use within this study. The six item measure was calibrated over a six point scale ranging from (1) strongly disagree to (6) strongly agree.

Sample items include, "I am confident in my ability to seek help and feedback from staff after I graduate," and "I am confident in my abilities to communicate effectively with patients when I graduate." For the current study, the alpha reliability estimate was acceptable ( $\alpha = .94$ ) and the adjusted reliability estimate based on maximally weighted factor scores was also supportive of the scales consistency ( $r_c = .88$ ). A multifactor confirmatory factor analysis was conducted and provided evidence of the scales convergent and discriminant validity from a scale of general self efficacy (Chen, Gully & Eden, 2001) and self esteem (Rosenberg, 1965;  $\chi^2_{(10)} = , p > 0.05$ , TLI = .99, CFI = .98, RMSEA = .04). Goodness of fit statistics also supported measurement invariance ( $\chi^2_{(15)} = 23.75$ ,  $p > 0.05$ , TLI = .99, CFI = .98, RMSEA = .03).

### *Social Support*

Social support was examined using items adapted from Jones' (1986) investiture / divestiture scale of organisational socialisation and was calibrated across 6-point scale ranging from strongly disagree (1) to strongly agree (6). Sample items for the social support scale include, "almost all of the staff on this placement were supportive of me personally," and "staff went out of their way to help me fit in within the workplace." Reliability estimates for the original scale were acceptable ( $\alpha = .79$ ; Jones, 1986) and for the current study, the alpha reliability estimate was acceptable ( $\alpha = .93$ ). In addition, the adjusted reliability estimate based on maximally weighted factor scores was also supportive of the scales consistency ( $r_c = .91$ ). A multifactor confirmatory factor analysis was conducted and provided evidence of the scales convergent and discriminant validity from the structured support scale ( $\chi^2_{(37)} = , p > 0.05$ , TLI = .98, CFI = .97, RMSEA = .03).

### *Structured Support*

Structured support was measured using a scale specifically designed for the nursing work integrated learning context, and was calibrated across a 6-point scale ranging from strongly disagree (1) to strongly agree (6). Sample items of the scale include, “This placement was structured so that I had the opportunity to discuss experiences and ask questions with experienced staff members” and “This placement was structured so that I could increase my knowledge, skills, and abilities.” For the current study, the alpha reliability estimate was acceptable ( $\alpha = .83$ ) and the adjusted reliability estimate based on maximally weighted factor scores was also supportive of the scales consistency ( $r_c = .73$ ). A multifactor confirmatory factor analysis was conducted and provided evidence of the scales convergent and discriminant validity from the scale of social support ( $\chi^2_{(37)} = , p > 0.05$ , TLI = .98, CFI = .97, RMSEA = .03), which identified that students meaningfully distinguish between both types of support (viz. social and structured support).

### *Positive Framing*

Positive framing was measured using a four item scale developed by Ashford and Black (1996) and was calibrated across a 6-point scale ranging from ‘to a very little extent’ (1) to ‘to a very large extent’ (6). Sample items for the scale include, “on placement to what extent did you try to see your situation as a challenge rather than a problem”, and “on placement to what extent did you try to look on the bright side of things”. Ashford and Black (1996) found a strong reliability estimate for the scale ( $\alpha = .84$ ) and reported evidence for the scales convergent and discriminant validity. For the current study, the alpha reliability estimate was acceptable ( $\alpha = .88$ ) and the adjusted reliability estimate based on maximally weighted factor scores was also supportive of the scales consistency ( $r_c = .82$ ).

### *Task Negotiation*

Task negotiation was measured using a four item scale developed by Ashford and Black (1996) and was calibrated across a 6-point scale ranging from 'to a very little extent' (1) to 'to a very large extent' (6). Sample items for the scale include, "on placement to what extent did you negotiate with others (including your supervisor and/or coworkers) about your task assignments", and "on placement to what extent did you negotiate with others (including your supervisor and/or coworkers) about their expectations of you". Ashford and Black (1996) reported a strong reliability estimate for the scale ( $\alpha = .90$ ) and produced evidence for the scales convergent and discriminant validity. For the current study, the alpha reliability estimate was acceptable ( $\alpha = .91$ ) and the adjusted reliability estimate based on maximally weighted factor scores was also supportive of the scales consistency ( $r_c = .94$ ).

## *Results and Discussion*

### *Goodness of Fit*

We estimated the first model with all of the hypothesised paths freed between the constructs. Goodness of fit statistics supported the initial model ( $\chi^2_{(2)} = 2.18, p > .05$ ). Thus, we proceeded to examine the direct effects between the constructs. Inspection of the standardised regression weights identified non-significant relationships between: social support and transition to practice self-efficacy ( $\beta = -0.01, p = ns$ ); task negotiation and transition to practice self-efficacy ( $\beta = -0.01, p = ns$ ); and structured support and professional fit ( $\beta = -0.01, p = ns$ ). To achieve parsimony, we deleted these paths from the model, and then recalculated goodness of fit statistics. The results produced excellent fit statistics for the refined model ( $\chi^2_{(5)} = 2.91, p > .05$ ). Comparative fit index (CFI) and root

mean squared error of approximation (RMSEA) values of .99 and .00, respectively, identified that the refined model represented a good fit for the data. Tucker Lewis Index (TLI) and the Adjusted Goodness of Fit Index (AGFI) were both above the recommended cut-off criteria with values of .97 and .96 respectively (Hu & Bentler, 1999). Taken together, the results provided strong support for the refined model (see figure 2).

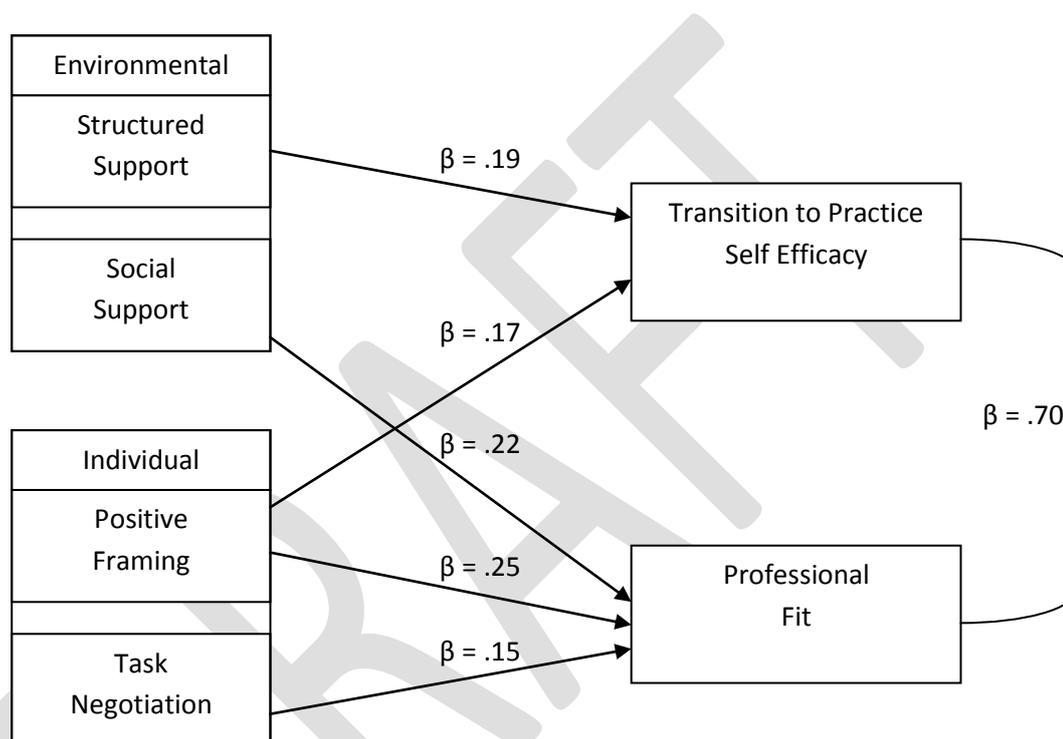


Figure 2. The refined model representing the antecedents of professional fit and transition to practice self-efficacy.

N.B., For clarity, the control variables (i.e., pre WIL placement professional fit and transition to practice self-efficacy) are not included within the model. Each construct represents a composite variable based on weighted factor scores derived from six respective single-factor confirmatory factor analyses.  $\beta$  is the standardised regression weight.

### Professional Fit

We then investigated the predictors of post WIL professional fit. Pre WIL professional fit perceptions, social support, task negotiation, and positive framing explained

approximately 68% of the variance in post WIL professional fit. In order of magnitude, pre WIL perceptions of professional fit ( $\beta = .58, p < 0.01$ ), positive framing ( $\beta = .25, p < 0.01$ ), social support ( $\beta = .22, p < 0.01$ ), and task negotiation ( $\beta = .15, p < 0.01$ ) were positively related to post WIL professional fit perceptions. Combined, these results suggested that for those who framed the learning experience as an opportunity, proactively negotiated WIL activities, and received positive social support experienced a greater level of professional fit following the WIL placement.

These results are consistent with research that suggests that a supportive environment reduces the 'reality shock' experienced when entering a new workplace, through helping the student to integrate with the team (Louis, 1980). This is also consistent with Schien (1971) who argued that students' should be nurtured in the formative stages of their career to facilitate their enculturation into profession. On the base of these results, one argument is that through supporting students through the WIL experience, they are better able to reduce stress and anxiety, and develop comfortable routines for interacting with others (Kim et al., 2005). Collectively, these results support the provision of workplace support (i.e., either initiated by the university or the organisation), to help improve the WIL experience.

Results clearly supported the role of positive framing and task negotiation, suggesting that the student is an active participant in the enculturation process. This is an important finding as research investigating the dual effects of the person and the environment is limited. These results suggested that positive framing helps students to overcome the stress and ambiguity of a new social context, and through viewing interactions with other professionals in a favourable light, contributes to higher levels of professional fit. Results also supported the logic that task negotiation improves perceptions

of professional fit. These results provided a clear line of argument suggesting that through these transactional experiences, students increase their opportunity to learn about the culture of the profession (e.g., values, goals, behavioural norms and commonly shared attitudes), thus improving perceptions of professional fit.

Following this, we calculated cross product terms and investigated the moderated effects. First, the relationship between task negotiation and professional fit was strongest for those who perceived a low level of social support within the WIL environment ( $\beta = .09, p < 0.05$ ). Analysis of the simple slopes identified that the relationship between task negotiation and professional fit was significant when social support was low and when it was high (simple slope =  $.28, p < .01$ , and simple slope =  $.17, p < .01$ , respectively); however, this relationship was stronger at lower levels of social support. These results suggested that the negative effect of low social support on professional fit can be reduced when the student engages in task negotiation. This is an important finding as it demonstrates that in the absence of social support, students can play an active role in improving their fit with the profession.

#### *Transition to Practice Self Efficacy*

We then investigated the predictors of post WIL placement transition to practice self-efficacy. Pre WIL placement transition to practice self-efficacy, structured support, and positive framing explained approximately 65% of the variance in post WIL transition to practice self-efficacy. After controlling for pre WIL transition to practice self-efficacy ( $\beta = .56, p < 0.01$ ), positive framing ( $\beta = .19, p < 0.01$ ), and structured support ( $\beta = .17, p < 0.01$ ) were positively related to post WIL efficacy beliefs.

At a more fine-grained level of detail, these findings are consistent with the theoretical proposition that the WIL experience improves self-efficacy through a process of enactive mastery and vicarious learning (Bandura, 1997). Specifically, the nature and extent to which the workplace facilitates student learning through providing meaningful activities is an important predictor of efficacy beliefs. This is an important finding, as it suggests that workplaces should be encouraged to identify students' learning requirements, and select those activities that provide an opportunity to build and refine skills. The results also identified that positive framing improves transition to practice self-efficacy. At the most general level, the results suggest that when students view challenges as opportunities, rather than a chance to fail, they are able to make the most of the learning experience. This can be interpreted in conjunction with empirical evidence that suggests that the 'reality shock' that is associated with workplace entry can negatively impact newcomer adjustment (Louis, 1980). Specifically, one clear line of argument is that those who apply a positive cognitive frame may avoid the negative implications of stress and anxiety on learning performance (Lepine et al., 2004). Collectively, these results demonstrate the utility in teaching students cognitive self-management strategies to improve transition to practice self-efficacy.

Results of the moderation analysis revealed that social support predicted transition to practice self-efficacy, but only at low levels of positive framing, as evidenced by the negative coefficient on the interaction term ( $\beta = -.10, p < 0.5$ ). Analysis of the simple slopes showed that at high levels of positive framing, social support was unrelated to transition to practice self-efficacy ( $B = .04, p = ns$ ). These results provide additional support for the benefit of positive framing. Essentially, a high level of positive framing replaces the effect of social support on transition to practice self-efficacy. However, at low levels of positive

framing, social support plays a key role in the prediction of efficacy beliefs. Consistent with theory on organisational entry, those who have a tendency to frame events in a pessimistic light, may experience a higher level of stress, thus benefit from the reassurance that social support provides.

### *Implications and Conclusion*

Several limitations should be noted. First, this research program sourced feedback from students only, thus, the possibility of common method variance cannot be ruled out. Secondly, although the use of structural equation modelling offers a strong test of theory, we were unable to expand on the findings to a great level of detail. Therefore, future research should conduct mixed method designs that incorporate qualitative research to expand on the findings. Third, given the small sample size, we were unable to validate the model on a hold out sample, therefore future research is needed that investigates the proposed relationships. Finally, 93.4% of participants within this study were women, thus future research is required that extend the generalisability of these results.

These limitations are countered by several important strengths. Firstly, through accounting for pre WIL perceptions, this research demonstrated that WIL predicts changes in efficacy beliefs and professional fit. This is an important finding, as it demonstrates the utility of WIL for improving the quality of the educational experience. To date, limited longitudinal quantitative research has accounted for changes in outcomes attributable to WIL, thus this paper makes a significant contribution to the field of enquiry. Second, one major implication from this study identified that students' are active agents in shaping their placement experience, which is consistent with theory from both the industrial/organisational psychology and WIL disciplines (Billett, 2007; Jones, 1986; Ashford

& Black, 1996; Kim et al., 2005; Crant, 2000). Therefore, both individual and environmental differences should be considered when attempting to improve the quality of WIL. Third, social and structured support offer additional means to improve efficacy and professional fit beliefs, thus, one possible implication from this finding is that organisations should be encouraged to identify placement activities that not only contribute to the goals of the organisation, but also aim to support students and help them build, or refine, their skill set.

In conclusion, WIL is an important component to the education experience of students. Both individual and environmental factors contribute to this experience, which influences students fit with the culture of the profession, and transition to practice self efficacy. Collectively, this research identified that those who study the effect of individual or environmental factors in isolation may gain an incomplete picture of the antecedents of WIL outcomes. In order to continue to build the quality of research in the area, researchers are recommended to extend these results, and simultaneously investigate other environmental and individual difference variables that may impact on WIL outcomes.

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