Effects of attributional retraining on writing performance and perceived competence of Taiwanese university nursing students☆,☆☆

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ABSTRACT

Background: Attributional retraining (AR) has been applied in various professional fields. The application of AR in nursing education is rarely seen.
Objectives: This study explores the effects of AR on university nursing students' writing performance, perceived competence, and the relationship between writing performance and perceived competence using a blended platform of online and face-to-face approaches.
Methods: A single-group experimental study was used. A total of 187 students participated in this study. The setting was the two-year vocational nursing course in a university. The Scale for Rating Composition Tasks and the Perceived Competence Scale were used before and after the AR intervention.
Results: The students' writing performance showed significant improvement after the intervention. AR had effectively influenced the students' perceived competence. The perceived competence of the students interacted with the writing performance improvements after the AR intervention.
Conclusions: The AR intervention suggests an alternative teaching approach that can help enhance students' English writing performance as well as perceived competence. The AR programme may be applied in English language teaching and professional courses.

1. Introduction

In light of increasing globalisation, the advancement of English proficiency in the English as a foreign language (EFL) context has become a prominent issue for nursing students as well as practitioners who are not native speakers of English. In general, nursing students in Taiwanese universities do not study the English language, including writing skills, as intensively as those studying in senior high schools and academically oriented universities. As a result, many nursing students are not confident in their overall English proficiency or their ability to write in English, whether in the classroom or in clinical settings. As written communication skills are critical for all nurses, nurse educators are continually seeking out programmes and strategies

that will best prepare their students. Oermann et al. (2015) conducted a systematic review of instructional methods for developing nurses' writing skills. The review demonstrates that theoretical frameworks concerned with the learners' psychological traits on top of the pedagogy seem not to have received enough attention. To compensate for the continuing lack of effective English instruction, an alternative to writing instruction may be the adoption of a psychological approach called attributional retraining.

Attribution theory was developed by Weiner (2010), and it is one of the most influential psychological theories on motivation. The basic assumption of attribution theory is that individuals strive for a realistic and casual understanding of life events, which leads to functional reactions. Based on this assumption, realistic attributions may lead to appropriate emotional or behavioural reactions. Alternatively, unrealistic attributions may result in dysfunctional emotions or behaviours. However, an individual's reactions to a life event depend on that person's personality, goals, and beliefs. Attributions are divided into three categories: locus of control (internal and external), stability (evaluating whether causes change over time), and controllability (evaluating whether one can control the causes) (Weiner, 2010). Furthermore, an attribution is underpinned by a three-stage process: (a) the individual perceives or observes a behaviour, (b) the individual believes that

the behaviour is intentional, and (c) the individual determines whether they believe others have been forced to perform the behaviour (Weiner, 2010).

In an educational context, the learners' perceived competence with regard to their likelihood of success or failure has a significant impact on their motivation, emotions, and academic performance (Weiner, 2010). Thus, based on the attribution theory, attributional retraining (AR) has been developed as a remedial intervention to assist learners by enhancing their internal, unstable, and controllable attributions regarding poor performance, or maladaptive perceptions, through a process of modelling, socialisation, and practice exercises (Chodkiewicz and Boyle, 2014).

Previous studies indicate that the effectiveness of AR has been underestimated due to ignorance of its potential for helping university students with a poor sense of control, who perceive themselves to be unable to handle learning activities and/or tasks effectively, or students with learned helplessness, who believe the demands and/or standards of the programme are impossible to meet successfully, leaving them less motivated to learn (Boese et al., 2013). Recent studies have concentrated on the transition from high school to university, since students are considered to be among the groups whose motivation and performance are easily affected by 'dysfunctional attribution' patterns (e.g. Hamm et al., 2014:232). A frequently applied strategy for introducing AR is to let university students experience a series of informational sessions followed by a consolidation phase. Informational sessions impart facts/knowledge, while consolidation relates to strategies/activities that enable a learner to practise/bring together learning of knowledge by practical application via authentic learning experiences (Hall et al., 2007).

This informational approach may be preceded by supplying the students with handouts prepared by the researchers (Hall et al., 2007) or by allowing them to view a videotaped discussion between graduate students or with a professor to illustrate the benefits of controllable and/or unstable attributions that are successful in cases of academic failure (Perry et al., 2010). Subsequent to this informational presentation, consolidation activities aimed at facilitating the cognitive integration of the attributional principles are recommended (Hall et al., 2006). Consolidation exercises may contain an aptitude or performance test (Menec et al., 1994), group discussion (Chodkiewicz and Boyle, 2014), or a writing exercise (Hall et al., 2006). A comprehensive proposition from Merrell (2008) expands AR into multiple dimensions of cognitive development: environmental enrichment, personal control training, resignation training, and cognitive AR. Thus, AR is not restricted to cognitive training alone but also encompasses environmental enrichment to immerse the students in a multifaceted learning context.

2. Background

Nursing students currently in the vocational training system in Taiwan complete a five-year nursing training programme in college after graduating from junior high school (Grade 9) and then go on to complete a two-year advanced learning programme at a nursing university. In general, even those in top nursing universities, such as those who participated in this research, do not study English as intensively as non-nursing students who study at senior high schools and academically oriented universities. Although nursing students study the English language for at least eight years before entering university, many have never learned English composition as such classes were not included in their official curricula. The students can thus be seen as novice writers of English prior to the commencement of writing instruction.

In clinical settings, English is a major medium of communication among medical professionals, whether it is used in medical records, on doctors' orders, or in nursing notes. Capability in EFL writing, an ultimate output technique that needs comprehensive instruction and learning effort, is thus crucial for healthcare professions. However, in spite of the importance of EFL writing skills, they have long been ignored in the vocational system of nursing education, as relevant instruction is not part of the nursing curricula and sufficient time for such instruction is not provided. This is true in spite of the fact that if nursing students go on to study at a university in an English speaking country, having the ability to write well in English would be of great benefit to them. Nursing students would also need to achieve the minimum standard of English proficiency to gain entry to these universities.

The English language course is a compulsory module that all students must complete during their first year of study. Learning to write in English is essential because passing the General English Proficiency Test (GEPT), a popular language test that is widely recognised in Taiwan, is a requirement for graduation. In the context of research, the GEPT policy has been in effect for more than eight years, and proficiency in four language skills—listening, reading, speaking, and writing—is mandatory. The primary goal of the teachers and students in English classes has been for the learners to pass the test at the fundamental level, which is designed for beginners. However, an investigation by a nursing university found that less than 20% of students being admitted every year meet the fundamental proficiency criteria. This result is consistent with the proficiency rates achieved by vocational and technological college students nationwide.

Applications of AR in nursing education have become apparent in recent years. For example, Dunn et al. (2013) investigated nursing students' causal attributions in learning pathophysiology. Students who held positive perceptions attributed their academic success to internal, controllable, and unstable causes – primarily 'effort' – while those who held negative perceptions attributed failure to external reasons such as task difficulty. In addition, Wu et al. (2015) evaluated the effect of an AR programme on nursing students' perceived career barriers in order to determine if the intervention was effective for fostering positive attributional styles. The nursing students receiving AR training outperformed the control group in terms of vocational knowledge, professional knowledge, and social ability. Based on the support of such increasing evidence, the authors believe that the implementation of AR should be further explored in nursing education. According to the nursing students' perceptions, a *lack of practice* is always a key attribution for their failure in learning writing, and this situation may persist without a change in educational policy (Tai, 2012). The implementation of an online collaborative writing platform may suggest a feasible solution that can help overcome these obstacles. As writing researchers are increasingly discussing the integration of Computer Assisted Language Learning (CALL), it has become an alternative way of teaching writing since we are now living in a world utilising lots of information technologies (Miyazoe and Anderson, 2010).

Guided by the attribution theory, the aim of this study was to examine whether the AR writing intervention would result in better student writing performance and improvements in the students' perceived competence. Additionally, as AR theory speculates that learners with a high perceived competence would result in a better academic performance (Weiner, 2010), the relationship between 'perceived competence' and 'performance' may need to be tested. The three research questions were as follows. (1) What are the effects of AR on nursing students' writing performance? (2) What are the effects of AR on nursing students' perceived competence regarding writing? (3) What is the relationship between nursing students' writing perceived competence and their actual performance after AR intervention?

3. Method

3.1. Research Design

This was a single-group experimental study as all the learners were recruited into the experimental group to learn English writing