**LITERATURE REVIEW**

* 1. **Introduction**

Peer learning has long been recognized as a beneficial teaching and learning method in different educational levels, especially for higher education (Falchikov, 2001). The method has made its appearance in the curriculum of a wide variety of disciplines, ranging from social sciences, technical to natural science subjects (Tariq, 2015; Muller et al., 2017). This is because numerous researches have revealed a positive relationship between peer tutoring and school performance of students in higher institutions (Malm et al, 2015; Tariq, 2015; Muller et al., 2017). This literature review, instead of covering university students in general, would focus solely on the international student's group. Specifically, this part attempts to investigate the impacts of peer learning on the adaptation process and learning outcomes of international students; followed by a description of potential challenges when engaging this learning method.

* 1. **Peer-assisted learning method**

**2.1. Current practices in peer learning method in higher education (HE)**

According to Falchikov (2001), the basic concept of peer learning involves people sharing an equal academic level assisting each other in knowledge accumulation, under the form of a tutorial. There are numerous variations of peer tutoring which can be summarized under four main categories namely same-level tutoring with students of equal progress; same-level tutoring with students of different status; cross-level peer tutoring in one institution and cross-level tutoring in two different academies (Falchikov, 2001; Tariq, 2015). Furthermore, peer teaching and learning includes a variety of techniques depending on the class nature and student’s ability (Falchikov, 2001). As mentioned previously, peer learning is becoming increasingly popular among higher educational institutions due to its widely recognized benefits (Tariq, 2015). The method and its variations are used extensively in a variety of disciplines by numerous institutions worldwide, according to Tariq (2015). For example, Tariq (2015) analyses the implementation of peer-assisted learning groups among the freshmen studying microbiology. Muller et al. (2017) also describe the adoption of peer-led team learning (PLTL) in an engineering college to assist the students with the introductory courses. Other fields that also involve peer learning are medical science and teacher-training programs (Houston and Lazenbatt, 1996; Wadoodi and Crosby, 2002).

**2.2. Peer learning in international higher education**

Peer learning also gains tremendous recognition in the context of internationalization in higher education recently. According to Idris et al. (2018), international students have to face numerous challenges when integrating into the host environment, as well as following a different academic regime. Therefore, international students often turn to their peers for support and assistance to overcome the difficulties, which emphasizes the importance of peer learning method (Idris et al., 2018). Considering the increasing number of international students in many higher institutions, peer learning is believed to be a cost-effective practice as it exerts little impact on "the standards and quality of learning experiences" (Idris et al., 2018, p. 5). Furthermore, with the assistance from local peers, international could find it easier to adapt to their new environment and gain further understanding about new learning techniques, which might lead to improved learning outcomes (Idris, et al. 2018). In a broader sense, interactions with peers from different countries could provide the students with a myriad of global perspectives, boosting the level of diversity within the classroom contexts (Lee and Rice, 2007). Peer learning, according to Evans (2015), peer learning in international contexts might exist in either formal (organized learning groups) or informal types (self-formed study pairs). Sawyer et al. (2008, as cited in Evans, 2015) claimed that there is a lack of peer-assisted learning programs to help international students within many higher institutions.

* 1. **Peer learning and students’ performance**

**3.1. Peer learning and its benefits regarding international students’ academic performance and adaptation process**

A number of researches and studies have managed to point out the benefits of peer learning, with primary emphasis on the improvement of students’ academic performance. Cohen et al. (1995) states that peer learning represents a student-centered method which promotes the sharing and accumulation of knowledge among peers rather than the traditional lecturing model. This method is believed to encourage more effective learning process, thus producing better academic results (Cohen et al., 1995). The benefits of peer learning are further reinforced based on the social learning theory of Bandura (1977), which explains that a socially-encouraged and self-directed environment would promote integration between "students' behavioral and cognitive learning capacity". In other words, the students can accumulate knowledge much easier through means of collaborative learning, or peer learning (Idris et al, 2018). Such easiness in knowledge accumulation would eventually lead to improved learning outcomes. This positive effect is investigated and proven through several types of research on the impacts of peer learning. Tariq (2015) conducted research on the use of peer-assisted learning among first-year students studying Microbiology, which reports significantly better learning results and improved students' retention during class. Similarly, Muller et al. (2017) point out an improvement in academic results achieved by engineering students after peer-led team learning sessions. When it comes to international students group, studies also discover significant benefits regarding the adoption of peer learning method. For example, Idris et al. (2018)'s investigation into an Irish public college reveals positive outcomes of international students with the peer learning experience. Specifically, it is reported that most surveyed students enjoyed great enhancement in their learning outcomes and capacity to adapt to the new learning environment, after participating in peer learning sessions. The peer learning programs, as explained by Idris et al. (2018), greatly encourages collaboration and a sense of community, a critical element for knowledge accumulation and critical thinking skills. However, there is a lack of in-depth and thorough studies into the relation between peer learning and the school performance of international students, as commented by Idris et al. (2018). Most studies over peer learning so far tend to focus mainly on university students studying specific major, from different university levels (first year, second year or post graduates) (Tariq, 2015; Muller et al., 2017)

**3.2. Potential challenges faced by international students engaging in peer learning**

Besides the above-mentioned benefits, there exist numerous challenges for international students when engaging in a peer learning experience. Boud (2001) mentions the cultural conflict that might arise during peer learning sessions since some students might respond negatively to their peers' feedback, plus some would prefer the traditional teacher-student class. Another challenge to consider is the language barrier, which would be a major difficulty when one student has to explain the lessons to other foreign classmates (Idris et al., 2018). The dissimilarities regarding cultures, beliefs, values, and religions could seriously hinder communication, which is an important component in peer learning for international students. A final challenge associated with peer learning experienced by international students is associated with their willingness and persistence when taking part in the peer-assisted learning group. Lack of determination and self-directedness would greatly prevent the students from exploiting the utmost benefits of the method (Tariq, 2015).

* 1. **Conclusion**

To sum up, the role of peer learning has been recognized as beneficial in improving students’ performance in higher education, especially for international students. Studies have revealed that peer learning could assist the foreign student in their adaptation process, as well as enhance their learning outcomes. However, certain challenges in implementing the learning method are also mentioned in these researches. Furthermore, the relation between the impacts of peer learning on international students in higher education needs further investigation and analysis, judging a dearth of in-depth studies into the field (Idris et al, 2018).

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