



## Review

Mutual benefits in academic-service partnership: An integrative review<sup>☆,☆☆</sup>

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## ABSTRACT

**Background:** Academic and service institutions involve with many challenges. Partnership programs are a golden opportunity to achieve mutual benefits to overcome these challenges. Identifying mutual benefits is the cornerstone of forming a successful partnership and guarantee to its continuity. There are definitions and instances of mutual benefits in the literature related to partnership programs, but there is no coherent evidence and clear picture of these benefits.

**Objective:** This study is conducted to identify mutual benefits in academic-service partnership by analyzing the definitions and instances of it in the literature.

**Design:** An integrative review of key papers regarding mutual benefits in academic-service partnership was undertaken. This review was guided by the framework described by Whittemore and Knaf.

**Data Sources:** Search of the following databases was conducted: MEDLINE, ERIC, Google Scholar, Emerald Insight and Science Direct. The search terms were mutual benefits, mutual gains, mutual interest, mutual expectations, mutual goals, mutual demand, partnership, collaboration, academic-service partnership and academic service collaboration.

**Review Methods:** Cooper's five-stage integrative review method was used. Quality evaluation of articles was conducted. Data were abstracted from included articles. The analysis was conducted based on the qualitative content analysis of the literature suggested by Zhang and Wildemuth.

**Results:** 28 articles were included in this review. Mutual benefits are described in four categories include: synergy in training and empowerment of human resources, education improvement, access to shared resources, facilitate production and application of beneficial knowledge into practice.

**Conclusion:** Mutual benefits in the academic-service partnership include a range of goals, interests, expectations, and needs of partner organizations that is achievable and measurable through joint planning and collaboration. We suggest academic and service policymakers to consider these benefits in the planning and evaluating partnership programs.

## 1. Introduction

Academic and service institutions involve with many challenges such financial constraints, workforce shortage, and educational space limitations (Beal, 2012; Breslin et al., 2011; DeBourgh, 2012). Partnership programs are a golden opportunity to achieve mutual benefits to overcome these challenges (Murray et al., 2010; O'Neil and Krauel,

2004).

Partnership is a basic strategy that partners can meet their needs by sharing resources, capabilities and skills (Pillay et al., 2014). Academic-service partnership as a type of inter-institutional partnership is a strategic relationship between academic and service institutions. The first step of forming academic-service partnership is to find mutual benefits of partners (Gillespie, 2002; Heshmati Nabavi et al., 2012a,

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2012b). There are valuable and potential abilities in each of these two institutions that should be used to improve outcomes (Warner and Burton, 2009). Identifying mutual benefits is the cornerstone of forming successful partnership and guarantee to its continuity (Didion et al., 2013; Gale and Beal, 2013; Heshmati Nabavi et al., 2012a, 2012b; Owen and Grealish, 2006). Mutual benefits can be also applied as criteria to evaluate effectiveness of partnership program (Cutler and Waine, 2000; Guest and Peccei, 2001; Heshmati Nabavi et al., 2012a, 2012b).

In the literature, mutual benefits have been named as mutual gains, mutual interests, mutual preferences, mutual expectations, mutual outcomes and so forth (Beal, 2012; Breslin et al., 2011; Debourgh, 2012). Furthermore, as a key concept is implied implicitly or explicitly in the literature related to the partnership (Brinkerhoff, 2002; Jonker and Nijhof, 2006; Pillay et al., 2014; Thomas et al., 2010; Thomson and Perry, 2006). Mutual benefits in the academic-service partnership has various aspects owing to broad, complicated and multidimensional relationships between these institutions (Heshmati Nabavi et al., 2010; Heshmati Nabavi et al., 2012a, 2012b; Salsali et al., 2009).

## 2. Aim

This integrative review is conducted to identify mutual benefits in academic-service partnership by analyzing its definitions and instances in the literature.

## 3. Question

What are mutual benefits in academic-service partnership?

## 4. Methods

An integrative review was conducted using the framework by Whittemore and Knafl (2005), to explore the literature concerning mutual benefits in academic-service partnership. The method was chosen, since it integrates the theoretical literature, qualitative and quantitative studies. This approach allows for various perspectives and in turn, enables the reviewer to better understand the concept. The integrative review method by Whittemore and Knafl (2005) consists of five stages: problem identification, literature search, data evaluation, data analysis and presentation (Whittemore and Knafl, 2005).

### 4.1. Search Strategy

The search was conducted between August and September of 2015 using the computerized databases of MEDLINE (PubMed), Education Resources Information Center (ERIC), Google Scholar, Emerald Insight and Science Direct. Published literature was searched from January 1st 2000 through September 25th 2015. The choice of this period is due to evolutions in education, particularly in nursing and midwifery since 2000, which has led service and academic institutions to turn to partnership programs as a strategy (Burns and Paterson, 2005; Edmond, 2001). Therefore, most studies in this field have been published since 2000. Search terms included mutual benefits OR mutual gains OR mutual interest OR mutual expectations OR mutual goals OR mutual demand AND Partnership OR collaboration OR academic-service partnership OR academic service collaboration.

### 4.2. Screening

From the search described above, 199,986 articles were identified (see Fig. 1 for data search process). A screening process eliminated duplicates and unrelated articles, resulting in 1071 articles. The abstracts of these articles were evaluated based on the following inclusion criteria: (a) related to academic-service partnership programs, (b) published between 2000 and 2015, (c) published in English. From the

1071 abstracts, 196 full-text articles were assessed for eligibility. Review the full text of these articles was evaluated based on quality assessment criteria (see Table 1). Among these cases, 28 articles met the criteria for the integrative review (see Table 2). Non-peer reviewed literature such as thesis, dissertations, government reports, news reports, commentaries, initiatives, reflective studies and annals of scientific events (abstracts) were excluded.

### 4.3. Quality Appraisal

Studies that fulfilled the inclusion criteria were then assessed for quality using the appraisal tool, which was developed purposefully based on the quality assessment criteria (see Table 1). This allowed the reviewers to examine the primary studies in some depth and ascertain the relevance and usefulness

of the studies. For instance, some criteria in appraisal tool evaluated the adequacy of the description of mutual benefits in partnership programs. To enhance rigor, primary studies were independently assessed by two members of the research team (the first and second authors) and areas of disagreement discussed. Where ambiguity remained, the third team member undertook a further assessment to reach a final agreement among the research team members.

### 4.4. Analysis

The analysis of the 28 articles was conducted based on the qualitative content analysis of the literature suggested by Zhang and Wildemuth (Zhang and Wildemuth, 2016). The research team analyzed the articles in eight steps. The articles were included for analysis as stated above. Then, according to the aim of this study, sections of the articles containing a definition or instances of the mutual benefits were studied as a unit of analysis. A sample of data was coded, and then the coding consistency was assessed by the research team. The categories were inductively obtained from the raw data. The resulting categories and the codes were assigned to them in the process of constant comparison. Codes integration was carried out based on the characteristics, differences, and similarities between them in necessary cases. The last stage of the analysis method was to report the findings.

## 5. Results

The results obtained from the review of 28 articles led to the formation of the four categories with regard to mutual benefits (see Table 2).

### 5.1. Synergy in Training and Empowerment of Human resource

#### 5.1.1. Educational Capacity Development

Educational capacity development is known as a mutual benefit to overcome the faculty shortage (Beal, 2012; Breslin et al., 2011) and educational resource limitations (Breslin et al., 2011). University can use skilled staff in the service environment as mentors to teach students (Cole, 2015; Jauhari et al., 2013). Educational written sources, classrooms and conference halls of university can be provided to the service partner when needed. Furthermore, the faculty members collaborate on conducting continuing education courses for staff (Poncelet et al., 2014; Stăiculescu et al., 2015; Warner and Burton, 2009).

#### 5.1.2. Better Transition From Student Role to Professional Role

Partnership programs can facilitate the transition to the professional role by improving students' key competencies and meta-competencies. Meta-competencies include management skills (Jauhari et al., 2013), communication skills (Debourgh, 2012; Dobalian et al., 2014), teamwork capability (Bleich et al., 2004; Debourgh, 2012; Didion et al., 2013; Van et al., 2015), reasoning, questioning, and analysis of real situations in the service environment (Debourgh, 2012; Jauhari and

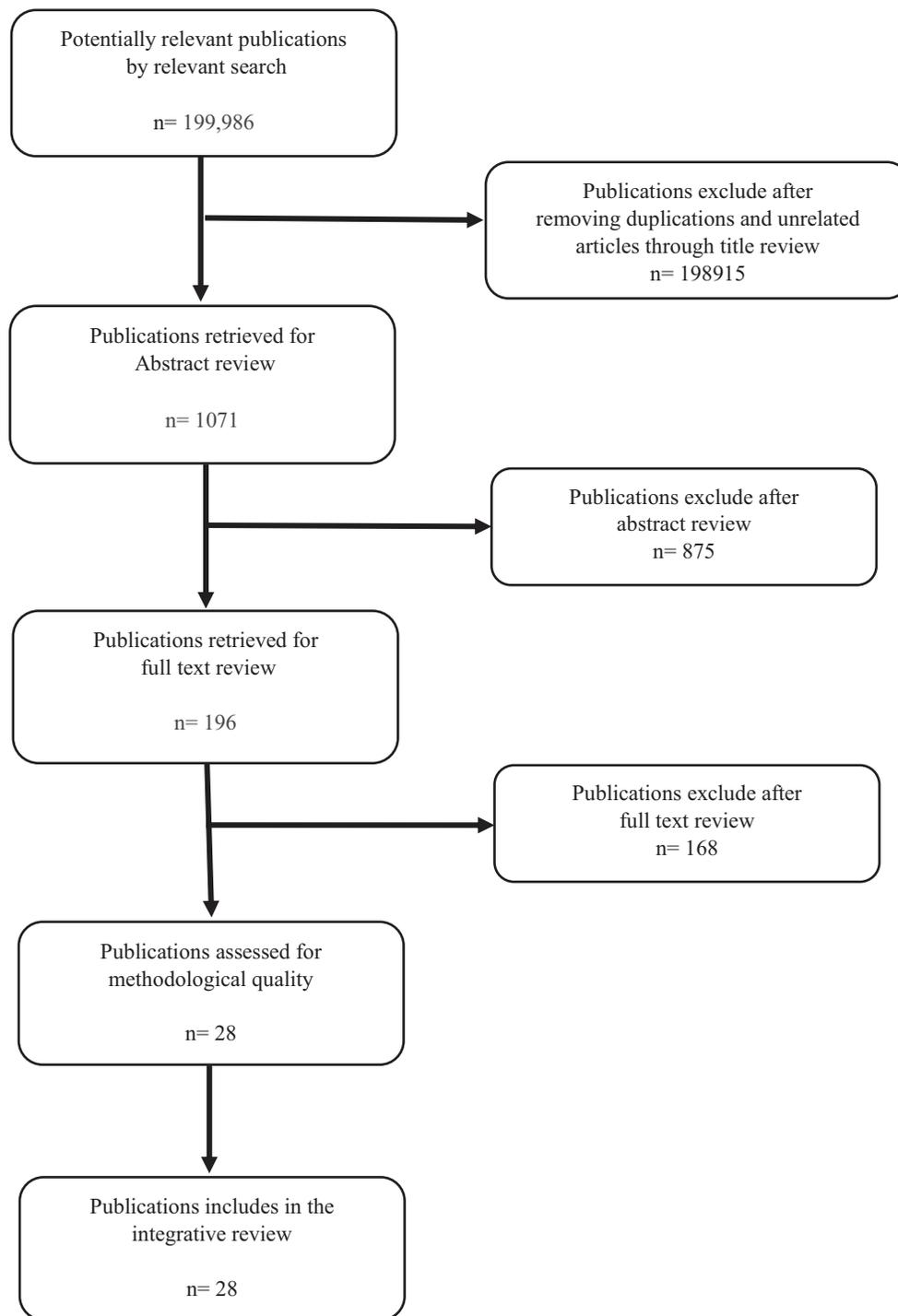


Fig. 1. Data search process.

**Table 1**  
Quality assessment criteria.

<ol style="list-style-type: none"> <li>1. Does the article describe an academic-service partnership program?</li> <li>2. Are there any implicit or explicit descriptions or instances for mutual benefits in an academic-service partnership program?</li> <li>3. Does the article describe some criteria affecting the successful academic-service partnership?</li> <li>4. Does the article describe some instances of mutual benefits in establishment of an academic-service partnership?</li> <li>5. Does the article describe some instances of mutual benefits in evaluation of an academic-service partnership?</li> </ol>
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Thomas, 2013). The ultimate goal of university is to train employable graduates. Achieving key competencies and meta-competencies resulted in employable graduates for work positions as a mutual goal for academic-service partnership (Freundl et al., 2012; Jauhari et al., 2013).

### 5.1.3. Staff Development

Staff development in line with the service needs is an important goal of academic-service partnership (Deborough, 2012; Marsiello and Criscitelli, 2014). Continuing education is conducted with the joint efforts of academic and service partners. Staff knowledge and skills are

**Table 2**  
Summary of research studies included in the integrative review.

No	Authors, year, country	Method	Aim	Some identified mutual benefits
1	Beal (2012) USA	Integrative review	To describe the academic-service partnerships in nursing and offer an agenda of priorities for moving forward.	Access to shared resources, cost-effective quality care, and education of students and staff.
2	Beal et al. (2011) USA	Case study	To identify the best practices in academic-service partnerships between the University of Texas Health Science Center San Antonio School of Nursing (SON) and key stakeholders in San Antonio.	Training well-educated professional nurses, developing evidence-based practice, expanding workforce capacity, training well-prepared students, and improving quality of care.
3	Bleich et al. (2004) USA	Case study	To describe three examples of academic-service partnership and benefits of these types of partnership.	Overcoming workforce shortage, maximizing access to shared financial sources, developing quality cost-effective service delivery, increasing generation of relevant research questions, having access to research subjects, and applying research findings in practice.
4	Breslin et al. (2011) USA	Review	To describe how one academic-practice partnership evolved over time as it sought to address the community's needs for a qualified competent nursing workforce.	Training qualified workforce for the future and improving relationship between organizations.
5	Brown et al. (2006) Australia	Review	To describe the development of successful collaborative partnerships.	Access to shared resources and expertise, well-educated staff, quality and safe patient care, and bridging the gap between each partner's expectations and needs.
6	Carpenter Jr et al. (2004) USA	Review	To discuss principles of a useful model to address academic-industry scientific collaboration	Having access to educational goals, expanding network of scientific collaborators, creating an opportunity to gain support for facility enhancement, and partners' satisfaction.
7	Didion et al. (2013) USA	Review	To describe the academic-clinical partnership and the role of CIP in implementing a QSEN-based clinical education model.	Better education, quality and safe patient care, and patient satisfaction.
8	Dobalian et al. (2014) USA	Qualitative content analysis	To identify how academic-practice partnership should be structured to maximize the potential benefits for each partner.	Preparing better nursing students to meet the demands of the practice setting, cultivating educational and practice innovations, and increasing recruitment and retention of nurses.
9	Dooley and Kirk (2007) UK	Case study	A short review on university-industry collaboration and to present a case study.	Closing university-industry gap, writing cooperative creative proposal, increasing technology and knowledge transfer, and reducing institutional barriers.
10	Fateh Rad et al. (2015) Iran	Research paper	To investigate the collaborative relationship between university and industry.	Having access to more funds for teaching and research, collaborative research, and modern equipment, and enhancement of the higher education.
11	Franco and Haase (2015) Portugal, Germany	Qualitative research	To examine various aspects of inter-organizational cooperation, particularly between healthcare institutions.	Having access to critical resources, transferring critical information, improving cost-efficiency, gaining new competences, and improving service quality.
12	Freundl et al. (2012) USA	Review	To describe a dedicated education unit model between 2 Veterans Health Administration Medical Centers and 2 Midwestern university schools of nursing.	Expanding education capacity, increasing baccalaureate student enrollment, providing opportunities for education and practice innovations, expanding co-learning, and improving evidence-based practice (EBP).
13	Henderson et al. (2006) UK, USA	Conceptual paper	To describe how a university-industry partnership can be used in two key ways.	Increased and updated knowledge of industrial practice, development of research methodology, publication of conference and journal papers, new graduate employee (s) with planned training and development, academic expertise and technology and knowledge transfer, and development of products, processes and patents.
14	Hilliard (2012) USA	Review	To discuss the overall benefits of university partnership with another university and partnership process.	Sharing research resources and experience, using new and improved technologies, collaborative educational research in solving problems for educators, and diversifying experience and professional development to improve teaching and learning.
15	Jauhari and Thomas (2013) UK	Qualitative research	To describe the process of developing effective university-industry partnerships.	Knowledge exchange, business development, creation of employment opportunities, strongly supported entrepreneurial work, transfer of knowledge from the academy to industry, and enhancement of student learning.
16	Jauhari et al. (2013) USA	Case study	To report a successful partnership between the University of Central Florida's (UCF's) Rosen College of Hospitality Management (RCHM) and hospitality and tourism industry in Central Florida.	Having access to part-time faculty and guest speakers for industry, industry mentors, and faculty advisory services in research, increasing research productivity, and improving student internships in industry.
17	Marsiello and Criscitelli (2014) USA	Review	A short review of partnership in preparing future well-educated workforce for nursing.	Cost-effectiveness, positive patient outcomes, constructive student learning, increased research productivity, faculty satisfaction, bridging practice and education gap.
18	Pillay et al. (2014) Australia	Qualitative research	To investigate some pieces of evidence of partnership activities associated with efficiency, and effectiveness may be assigned to schools projects.	Providing better work experience for students, and offering 'real world' experience.
19	Poncelet et al. (2014) USA	Case study	A case study about partnership program between an Academic Medical Center and a Community Health System.	Addressing core competencies for nurses such as systems-based practice, practice-based learning, and inter-professional care, faculty development, professional satisfaction, and high-quality faculty development.
20	Roche et al. (2004) USA	Case study	To describe the structure, process, and outcomes of a partnership.	Increasing staff retention, and having access to better environments for learning, and students' satisfaction.

(continued on next page)

Table 2 (continued)

No	Authors, year, country	Method	Aim	Some identified mutual benefits
21	Stăiculescu et al. (2015) Romania	Review	To present the forms of partnership developed by universities and businesses, and analyze views expressed by the representatives of employers engaged in an active partnership.	Developing professional skills of students, and received advertising in academia.
22	Tu et al. (2015) China	Research paper	To present a postgraduate training mode with cooperation of government, enterprises, universities, institutes and employers.	Developing postgraduate innovation education, scientific research and project development, open channel for information exchange and sharing educational resources, improving research conditions for training postgraduates, and creating a better atmosphere for innovation practice.
23	Van et al. (2015) USA	Case study	To discuss factors of forming robust partnership, benefits arising from the partnership and challenges of encountering the academic–practice partnership.	Improving relationships between academia and practice, and transitional and community-based nursing education.
24	Vassie and Fuller (2003) UK	Review	To explore the inputs required and the outputs within a partnership arrangement.	Developing a better relationship, and combined skills for access to optimum solution, and minimizing conflicts.
25	Warner and Burton (2009) USA	Review	To present the DEU model and compare it with traditional model of academic-service collaboration in nursing.	Overcoming workforce shortages, expanding nursing education capacity, improving quality and safety of health care, more intense and practice-grounded student experience, and providing a pipeline of qualified nurses.
26	Xippolitos et al. (2011) USA	Case study	To present Stony Brook University Medical Center's (SBUMC) academic-service partnership implementing several of the RWJ/IOM recommendations.	Improving quality of care and safety, enhancing staff satisfaction, decreasing interruptions to nursing workflow, improving hospital discharge processes, and reducing the readmission rate.
27	Ylikoski and Kortelainen (2012) Finland	Review	To present difficulties in managing partnerships and some solutions.	Having access to an authentic learning environment, employee training, fostering experiential learning, and workplaces for student training.
28	Zamanzadeh et al. (2014) Iran	Qualitative content analysis	To explore the meaning of collaboration through conducting a qualitative research approach.	Providing a safe care, reducing error, improving mutual satisfaction, providing safe team care, maximizing clinical efficacy, and improving problem-solving.

improved and their capabilities to provide high quality and safe services are developed through such programs (Debourgh, 2012). This synergy for staff development results in the appropriate and quality human resource (Freundl et al., 2012; Ylikoski and Kortelainen, 2012).

## 5.2. Education Improvement

### 5.2.1. Access to Supportive Learning Environment

Students can gain the required experience to achieve professional competence in a supportive learning environment. Partnership programs help to create a supportive learning environment by engaging staff in creating suitable learning opportunities for students in the service environment (Bleich et al., 2004; Debourgh, 2012; Marsiello and Criscitelli, 2014). Furthermore, interactive learning between students and staff occurs in such atmosphere (Bleich et al., 2004; Debourgh, 2012; Warner and Burton, 2009).

### 5.2.2. Curriculum Improvement

Curriculum improvement includes modifications in courses according to the students' practical needs and enhancement of creativity and innovation in graduates (Didion et al., 2013; Roche et al., 2004; Stăiculescu et al., 2015; Tu et al., 2015; Xippolitos et al., 2011). The joint planning of decision-makers at university and service is required to achieve a curriculum that can meet the theoretical and practical needs of students. In close partnership relationship with the service, implementing university reforms and updating courses in accordance with the changing needs of the service. Thus, graduates achieve the necessary capabilities to be employed in the service environment (Freundl et al., 2012; Ylikoski and Kortelainen, 2012) and the need for expert and qualified human resource is fulfilled (Debourgh, 2012; Jauhari and Thomas, 2013; Poncelet et al., 2014).

## 5.3. Access to Shared Resources

### 5.3.1. Access to Mutual Human Resource

The human resource shortage is a common challenge in university and service. Partnership programs allow the partners to achieve mutual human resource (Beal, 2012; Beal et al., 2011; Breslin et al., 2011; Franco and Haase, 2015; Jauhari and Thomas, 2013; Marsiello and Criscitelli, 2014). Furthermore, access to mutual capabilities, skills and expertise of human resource is another benefit qualitatively (Carpenter Jr et al., 2004; Jauhari and Thomas, 2013; Pillay et al., 2014). For example, academics have capabilities in research, and staff has a higher mastery over the problems and conflicts of service. These two capabilities can mutually lead to resolution of problems in a scientific research-based manner. In fact, staff identifies the problems and the academics provide scientific solutions through implementing research projects (Fateh Rad et al., 2015; Jauhari et al., 2013; Vassie and Fuller, 2003; Xippolitos et al., 2011).

### 5.3.2. Access to Mutual Financial Sources

Partnership programs provide access to mutual financial resource (Dooley and Kirk, 2007; Xippolitos et al., 2011). For instance, industries in most cases have a better financial status; thus, they offer financial support to universities during the partnership. In this regard, they receive specialized research counseling to solve problems from academics. In addition, academics can conduct continuing education courses for their staff (Hilliard, 2012; Jauhari et al., 2013; Vassie and Fuller, 2003) (Table 3).

## 5.4. Production and Application of Beneficial Knowledge Into Practice

### 5.4.1. Beneficial Knowledge Development

Beneficial knowledge is based on the mutual needs of the partners with considerable focus on resolving the service challenges. In other words, it is the applied knowledge into practice (Brown et al., 2006;

**Table 3**

Summary of categories and sub categories.

Category	Sub category
Synergy in training and empowerment of human resource	Educational capacity development Better transition from student role to professional role Staff development
Education improvement	Access to supportive learning environment Curriculum improvement
Access to shared resources	Access to mutual human resource Access to mutual financial sources
Production and application of beneficial knowledge into practice	Beneficial knowledge development Research conditions improvement Bridging the gap between theory and practice

Jauhari and Thomas, 2013; Poncelet et al., 2014; Roche et al., 2004). In academic-service partnership, partners are aware of mutual challenges. Therefore, they can design the joint research projects leading to the production of applied knowledge to solve challenges. Furthermore, another benefit is joint publications arising from research projects (Fateh Rad et al., 2015; Jauhari et al., 2013; Vassie and Fuller, 2003; Xippolitos et al., 2011).

### 5.4.2. Research Conditions Improvement

Development of relationships between service and university provides conditions to benefit from mutual research capabilities and facilities (Beal, 2012; Poncelet et al., 2014; Xippolitos et al., 2011). Service partner can provide grants for the university to conduct applied research projects. Access to research subjects and research environment is also facilitated for the academics in this type of partnership (Brown et al., 2006; Hilliard, 2012; Jauhari and Thomas, 2013; Roche et al., 2004).

### 5.4.3. Bridging the Gap Between Theory and Practice

The theory-practice gap is an old challenge in the relationship between university and service. Many of the benefits mentioned in the previous sections can reduce this gap. Effective joint efforts in bridging the theory-practice include: developing constructive interactions between university and service, directing university research projects toward solving problems in the service, developing evidence-based practice and modification of academic courses according to the students' practical needs for service (Bleich et al., 2004; Didion et al., 2013; Fateh Rad et al., 2015; J. Henderson et al., 2006; Hilliard, 2012; Jauhari and Thomas, 2013; Roche et al., 2004; Stăiculescu et al., 2015; Zamanzadeh et al., 2014).

## 6. Discussion

This integrated review was an attempt to identify mutual benefits in academic-service partnership. Analysis of the included articles showed that mutual benefits were defined in education, research, finance and human resource. According to our review, achieving these benefits is the most important reason to design and implement the academic-service partnership (Gillespie, 2002; Heshmati Nabavi et al., 2012b).

The human resource shortage is an old challenge, especially in medical science. Partnership programs are an effective strategy to overcome the human resource shortage through educational capacity development (Bleich et al., 2004; Clark and Allison-Jones, 2011; Kinnaman and Bleich, 2004; Waters and Brigden, 2013). Universities are encountered with educational capacity limitation. One reason for this limitation is faculty shortage (Breslin et al., 2011; Gale and Beal, 2013; Marsiello and Criscitelli, 2014; Poncelet et al., 2014). Expert staff collaborates as mentors for teaching students through the academic-service partnership. Waters points out that the service partners, as co-

educators, become involved in training students in the academic-service partnership. Then, they provide the possibility of access to future well-educated workforce by designing meaningful and beneficial practical projects for students and by providing feedback on their learning experience in service (Cole, 2015; Myler et al., 2014). Thus, in addition to overcoming the faculty shortage, better student readiness and higher mentors' satisfaction are achieved (Bvumbwe, 2016).

Access to the qualified human resource is considered a mutual benefit in the academic-service partnership (Freundl et al., 2012; Ylikoski and Kortelainen, 2012; Debourgh, 2012; Jauhari and Thomas, 2013; Poncelet et al., 2014). Academic-service partnership leads to the promotion of effective education, improvement of practical skills and progress of students' professional competencies (Debourgh, 2012; Murray and James, 2012). Staff needs to improve teamwork skills, communication skills, and practical skills. Furthermore, they should be updated in line with clients' changing needs (Caron et al., 2013; Kitto et al., 2013; Laguador and Ramos, 2014). The academic-service partnership helps to enhance staff's knowledge and skills through continuing education. Thus, academic-service partnership results in providing safe and high-quality services (Caron et al., 2013; Debourgh, 2012; Diaz et al., 2015; Dobalian et al., 2014; Murray and James, 2012).

Non-supportive learning environment causes stress and anxiety for students, having a negative impact on their learning (Del Prato et al., 2011; Henderson et al., 2010; Rhodes et al., 2012). Therefore, access to supportive learning environments is necessary for optimal learning (Henderson et al., 2010; Mehrdad et al., 2008). Academic-service partnership leads to supportive learning environment by improving relationships between students and staff (Bvumbwe, 2016) and engaging them in students' education. Moreover, professional socialization process is facilitated for students (Henderson et al., 2010), and staff is stimulated to study more in such an atmosphere (Rhodes et al., 2012).

Studies show low evidence-based practice, especially in nursing (Melnyk et al., 2004; Melnyk et al., 2016). There are several reasons for this issue. In some cases, research findings are not applicable in the real environment. The ambiguousness of the research procedure is a barrier to evidence-based practice (Elahi et al., 2014; Heydari and Emami Zeydi, 2014). Compatibility of research topics with the service challenges is a benefit in the academic-service partnership. Close relationships resulting from an academic-service partnership helps academics to design research projects toward resolution of the service challenges. Therefore, research findings become more applied, and evidence-based practice increases (Freundl et al., 2012).

Bridging the theory-practice gap is an important benefit in the academic-service partnership. The literature shows that it is possible to bridge theory-practice gap and increase evidence-based practice by the academic-service partnership (Brown et al., 2006; Dooley and Kirk, 2007; Marsiello and Criscitelli, 2014). Furthermore, this type of partnership leads to linking academic education to the service needs and better practical results (Murray and James, 2012). Generally, all the benefits mentioned in the previous sections somehow play a role in bridging the theory-practice gap.

## 7. Conclusion

This integrative review was specific to identify mutual benefits in the academic-service partnership and was guided by a targeted research question. Mutual benefits in the academic-service partnership include a range of goals, interests, expectations, and needs of partner organizations that is achievable and measurable through joint planning and collaboration. Academic and service institutes can enjoy mutual benefits in terms of efficient human resource training through practical education, increasing access the resources, and production and application of beneficial knowledge into practice. It could be suggested to academic and service policymakers to consider these benefits in planning, organizing and evaluating partnership programs.

## Declaration of Conflicting Interests

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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## References

- Beal, J.A., 2012. Academic-service partnerships in nursing: an integrative review. *Nurs Res Pract* 2012. <http://dx.doi.org/10.1155/2012/501564>.
- Beal, J.A., Breslin, E., Austin, T., Brower, L., Bullard, K., Light, K., ... Ray, N., 2011. Hallmarks of best practice in academic-service partnerships in nursing: lessons learned from San Antonio. *J. Prof. Nurs.* 27 (6), e90-e95. <http://dx.doi.org/10.1016/j.profnurs.2011.07.006>.
- Bleich, M.R., Hewlett, P.O., Miller, K.L., Bender, K., 2004. Beyond tradition: synergizing intellectual and material capital to forge the new academic-service partnership. *J. Prof. Nurs.* 20 (5), 285–294. <http://dx.doi.org/10.1016/j.profnurs.2004.07.007>.
- Breslin, E., Stefl, M., Yarbrough, S., Frazor, D., Bullard, K., Light, K., ... Lowe, A., 2011. Creating and sustaining academic-practice partnerships: lessons learned. *J. Prof. Nurs.* 27 (6), e33-e40. <http://dx.doi.org/10.1016/j.profnurs.2011.08.008>.
- Brinkerhoff, J.M., 2002. Assessing and improving partnership relationships and outcomes: a proposed framework. *Eval. Program Plann.* 25 (3), 215–231. [http://dx.doi.org/10.1016/S0149-7189\(02\)00017-4](http://dx.doi.org/10.1016/S0149-7189(02)00017-4).
- Brown, D., White, J., Leibbrandt, L., 2006. Collaborative partnerships for nursing faculties and health service providers: what can nursing learn from business literature? *J. Nurs. Manag.* 14 (3), 170–179. <http://dx.doi.org/10.1111/j.1365-2934.2006.00598.x>.
- Burns, L., Paterson, I.M., 2005. Clinical practice and placement support: supporting learning in practice. *Nurse Educ. Pract.* 5 (1), 3–9. <http://dx.doi.org/10.1016/j.nepr.2004.02.001>.
- Bvumbwe, T., 2016. Enhancing nursing education via academic-clinical partnership: an integrative review. *Int. J. Nurs. Sci.* 3 (3), 314–322. <http://dx.doi.org/10.1016/j.ijnss.2016.07.002>.
- Caron, R.M., Hiller, M.D., Wyman, W.J., 2013. Engaging local public health system partnerships to educate the future public health workforce. *J. Community Health* 38 (2), 268–276. <http://dx.doi.org/10.1007/s10900-012-9610-8>.
- Carpenter Jr., W.T., Koenig, J.L., Bilbe, G., Bischoff, S., 2004. At issue: a model for academic/industry collaboration. *Schizophr. Bull.* 30 (4), 997. <http://dx.doi.org/10.1093/oxfordjournals.schbul.a007148>.
- Clark, R.C., Allison-Jones, L., 2011. Investing in human capital: an academic-service partnership to address the nursing shortage. *Nurs. Educ. Perspect.* 32 (1), 18–21.
- Cole, G., 2015. The value of mentoring: a mutually beneficial experience for mentor and mentee. *Dev. Learn. Organ.* 29 (4), 22–24. <http://dx.doi.org/10.1108/DLO-04-2015-0039>.
- Cutler, T., Waine, B., 2000. Mutual benefits or managerial control? The role of appraisal in performance related pay for teachers. *Br. J. Educ. Stud.* 48 (2), 170–182. <http://dx.doi.org/10.1111/1467-8527.t01-1-00140>.
- Debourgh, G.A., 2012. Synergy for patient safety and quality: academic and service partnerships to promote effective nurse education and clinical practice. *J. Prof. Nurs.* 28 (1), 48–61. <http://dx.doi.org/10.1016/j.profnurs.2011.06.003>.
- Del Prato, D., Bankert, E., Grust, P., Joseph, J., 2011. Transforming nursing education: the review of stressors and strategies that support students' professional socialization. *Adv. Med. Educ. Pract.* 2, 109. <http://dx.doi.org/10.2147/AMEP.S18359>.
- Diaz, J.M., Stallings, K.D., Kc, B., Seekamp, E., 2015. Evaluating multi-institutional partnership sustainability: a case study of collaborative workforce development in renewable energy assessment. *Educ. Res. Eval.* 21 (5–6), 466–484. <http://dx.doi.org/10.1080/13803611.2015.1121833>.
- Didion, J., Kozy, M.A., Koffel, C., Oneil, K., 2013. Academic/clinical partnership and collaboration in quality and safety education for nurses education. *J. Prof. Nurs.* 29 (2), 88–94. <http://dx.doi.org/10.1016/j.profnurs.2012.12.004>.
- Dobalian, A., Bowman, C.C., Wyte-Lake, T., Pearson, M.L., Dougherty, M.B., Needleman, J., 2014. The critical elements of effective academic-practice partnerships: a framework derived from the Department of Veterans Affairs Nursing Academy. *BMC Nurs.* 13 (1), 36. <http://dx.doi.org/10.1186/s12912-014-0036-8>.
- Dooley, L., Kirk, D., 2007. University-industry collaboration: grafting the entrepreneurial paradigm onto academic structures. *Eur. J. Innov. Manag.* 10 (3), 316–332. <http://dx.doi.org/10.1108/14601060710776734>.
- Edmond, C.B., 2001. A new paradigm for practice education. *Nurse Educ. Today* 21 (4), 251–259. <http://dx.doi.org/10.1054/nedt.2000.0543>.
- Elahi, N., Alhani, F., Ahmadi, F., 2014. Professional partnership: nurses' experience of theory-practice gap in nursing education. *J. Nurs. Educ.* 3 (1), 21–31.
- Fateh Rad, M., Seyedesfahani, M.M., Jalilvand, M.R., 2015. An effective collaboration model between industry and university based on the theory of self organization: a system dynamics model. *J. Sci. Technol. Policy Manag.* 6 (1), 2–24. <http://dx.doi.org/10.1108/JSTPM-08-2014-0035>.
- Franco, M., Haase, H., 2015. Inter-organizational cooperation in community health organizations: a competence-based perspective. *Int. J. Health Care Qual. Assur.* 28 (2),

- 193–210. <http://dx.doi.org/10.1108/LJHCQA-07-2014-0081>.
- Freundl, M., Anthony, M., Johnson, B., Harmer, B.M., Carter, J.M., Boudiab, L.D., Nelson, V., 2012. A dedicated education unit VA medical centers and baccalaureate nursing programs partnership model. *J. Prof. Nurs.* 28 (6), 344–350. <http://dx.doi.org/10.1016/j.profnurs.2012.05.008>.
- Gale, S.A., Beal, J.A., 2013. Building academic-practice partnerships: sharing best practices. *Nurs. Leadersh.* 11 (4), 21–28. <http://dx.doi.org/10.1016/j.mnl.2013.06.001>.
- Gillespie, M., 2002. Student-teacher connection in clinical nursing education. *J. Adv. Nurs.* 37 (6), 566–576. <http://dx.doi.org/10.1046/j.1365-2648.2002.02131.x>.
- Guest, D.E., Peccei, R., 2001. Partnership at work: mutuality and the balance of advantage. *Br. J. Ind. Relat.* 39 (2), 207–236. <http://dx.doi.org/10.1111/1467-8543.00197>.
- Henderson, J., McAdam, R., Leonard, D., 2006. Reflecting on a TQM-based university/industry partnership: contributions to research methodology and organisational learning. *Manag. Decis.* 44 (10), 1422–1440. <http://dx.doi.org/10.1108/00251740610715731>.
- Henderson, A., Twentymen, M., Eaton, E., Creedy, D., Stapleton, P., Lloyd, B., 2010. Creating supportive clinical learning environments: an intervention study. *J. Clin. Nurs.* 19 (1–2), 177–182. <http://dx.doi.org/10.1111/j.1365-2702.2009.02841.x>.
- Heshmati Nabavi, F., Vanaki, Z., Mohammadi, E., 2010. Barrier to forming and implementing academic service partnership in nursing: a qualitative study. *Iran. J. Nurs. Res.* 5 (17), 32–46.
- Heshmati Nabavi, F., Vanaki, Z., Mohammadi, E., 2012a. The mechanisms to attract nurses' Partnership in clinical education: perspective of managers, nursing educators, and staff nurses. *Iran. J. Med. Educ.* 11 (6), 554–568.
- Heshmati Nabavi, F., Vanaki, Z., Mohammadi, E., 2012b. Systematic review: process of forming academic service partnerships to reform clinical education. *West. J. Nurs. Res.* 34 (1), 118–141. <http://dx.doi.org/10.1177/0193945910394380>.
- Heydari, A., Emami Zeydi, A., 2014. Barriers to and facilitators of research utilization among Iranian nurses: a literature review. *J. Caring Sci.* 3 (4), 265. <http://dx.doi.org/10.5681/jcs.2014.029>.
- Hilliard, A., 2012. Sharing resources: benefits of university partnerships to improve teaching, learning and research. *Int. J. Educ. Res.* 8 (1), 63. <http://dx.doi.org/10.19030/jier.v8i1.6697>.
- Jauhari, V., Thomas, R., 2013. Developing effective university-industry partnerships: an introduction. *Worldw. Hosp. Tour. Themes* 5 (3), 238–243. <http://dx.doi.org/10.1108/WHATT-02-2013-0006>.
- Jauhari, V., Thomas, R., Pizam, A., Okumus, F., Hutchinson, J., 2013. Forming a long-term industry-university partnership: the case of Rosen College of Hospitality Management. *Worldw. Hosp. Tour. Themes* 5 (3), 244–254. <http://dx.doi.org/10.1108/WHATT-02-2013-0003>.
- Jonker, J., Nijhof, A., 2006. Looking through the eyes of others: assessing mutual expectations and experiences in order to shape dialogue and collaboration between business and NGOs with respect to CSR. *Corp. Gov.* 14 (5), 456–466. <http://dx.doi.org/10.1111/j.1467-8683.2006.00518.x>.
- Kinnaman, M.L., Bleich, M.R., 2004. Collaboration: aligning resources to create and sustain partnerships. *J. Prof. Nurs.* 20 (5), 310–322. <http://dx.doi.org/10.1016/j.profnurs.2004.07.009>.
- Kitto, S., Bell, M., Peller, J., Sargeant, J., Etchells, E., Reeves, S., Silver, I., 2013. Positioning continuing education: boundaries and intersections between the domains continuing education, knowledge translation, patient safety and quality improvement. *Adv. Health Sci. Educ. Theory Pract.* 18 (1), 141–156. <http://dx.doi.org/10.1007/s10459-011-9340-1>.
- Laguador, J.M., Ramos, L.R., 2014. Industry-partners' preferences for graduates: input on curriculum development. *J. Educ. Lit.* 1 (1), 1–8.
- Marsiello, C.M., Criscitelli, T.M., 2014. Nurse leader collaboration and partnering: looking to the future. *Nurs. Leadersh.* 12 (6), 41–44. <http://dx.doi.org/10.1016/j.mnl.2014.09.003>.
- Mehrdad, N., Salsali, M., Kazemnejad, A., 2008. The spectrum of barriers to and facilitators of research utilization in Iranian nursing. *J. Clin. Nurs.* 17 (16), 2194–2202. <http://dx.doi.org/10.1111/j.1365-2702.2007.02040.x>.
- Melnyk, B.M., Fineout-Overholt, E., Fischbeck Feinstein, N., Li, H., Small, L., Wilcox, L., Kraus, R., 2004. Nurses' perceived knowledge, beliefs, skills, and needs regarding evidence-based practice: implications for accelerating the paradigm shift. *Worldviews Evid.-Based Nurs.* 1 (3), 185–193. <http://dx.doi.org/10.1111/j.1524-475X.2004.04024.x>.
- Melnyk, B.M., Gallagher-Ford, L., Thomas, B.K., Troseth, M., Wyngarden, K., Szalacha, L., 2016. A study of chief nurse executives indicates low prioritization of evidence-based practice and shortcomings in hospital performance metrics across the United States. *Worldviews Evid.-Based Nurs.* 13 (1), 6–14. <http://dx.doi.org/10.1111/wvn.12133>.
- Murray, T.A., James, D.C., 2012. Evaluation of an academic service partnership using a strategic alliance framework. *Nurs. Outlook* 60 (4), e17–e22. <http://dx.doi.org/10.1016/j.outlook.2011.10.004>.
- Murray, T.A., Crain, C., Meyer, G.A., McDonough, M.E., Schweiss, D.M., 2010. Building bridges: an innovative academic-service partnership. *Nurs. Outlook* 58 (5), 252–260. <http://dx.doi.org/10.1016/j.outlook.2010.07.004>.
- Myler, L.A., Buch, C.L., Hagerty, B.M., Ferrari, M., Murphy, S.L., 2014. Mentor satisfaction using a new model of clinical education. *Nurs. Educ. Perspect.* 35 (6), 367–371. <http://dx.doi.org/10.5480/13-1091.1>.
- O'Neil, E., Krauel, P., 2004. Building transformational partnerships in nursing. *J. Prof. Nurs.* 20 (5), 295–299. <http://dx.doi.org/10.1016/j.profnurs.2004.07.006>.
- Owen, J., Grealish, L., 2006. Clinical education delivery—a collaborative, shared governance model provides a framework for planning, implementation and evaluation. *Collegian* 13 (2), 15–21. [http://dx.doi.org/10.1016/S1322-7696\(08\)60519-3](http://dx.doi.org/10.1016/S1322-7696(08)60519-3).
- Pillay, H., Watters, J.J., Hoff, L., Flynn, M., 2014. Dimensions of effectiveness and efficiency: a case study on industry-school partnerships. *J. Vocat. Educ. Train.* 66 (4), 537–553. <http://dx.doi.org/10.1080/13636820.2014.961524>.
- Poncellet, A.N., Mazotti, L.A., Blumberg, B., Wamsley, M.A., Grennan, T., Shore, W.B., 2014. Creating a longitudinal integrated clerkship with mutual benefits for an academic medical center and a community health system. *Perm. J.* 18 (2), 50. <http://dx.doi.org/10.7812/TPP/13-137>.
- Rhodes, M.L., Meyers, C.C., Underhill, M.L., 2012. Evaluation outcomes of a dedicated education unit in a baccalaureate nursing program. *J. Prof. Nurs.* 28 (4), 223–230. <http://dx.doi.org/10.1016/j.profnurs.2011.11.019>.
- Roche, J.P., Lamoureux, E., Teehan, T., 2004. A partnership between nursing education and practice: using an empowerment model to retain new nurses. *J. Nurs. Adm.* 34 (1), 26–32.
- Salsali, M., Cheraghi, M.A., Ahmadi, F., 2009. Organizational factors influencing knowledge transfer into practice in Iranian nursing context: a grounded theory approach. *Int. J. Nurs. Pract.* 15 (5), 426–436. <http://dx.doi.org/10.1111/j.1440-172X.2009.01775.x>.
- Stăiculescu, C., Rîchițeanu-Năstase, E.-R., Dobrea, R.C., 2015. The university and the business environment-partnership for education. *Procedia. Soc. Behav. Sci.* 180, 211–218. <http://dx.doi.org/10.1016/j.sbspro.2015.02.107>.
- Thomas, M., Rowe, F., Harris, N., 2010. Understanding the factors that characterise school-community partnerships: the case of the Logan healthy schools project. *Health Educ.* 110 (6), 427–444. <http://dx.doi.org/10.1108/09654281011087242>.
- Thomson, A.M., Perry, J.L., 2006. Collaboration processes: inside the black box. *Public Adm. Rev.* 66 (s1), 20–32. <http://dx.doi.org/10.1111/j.1540-6210.2006.00663.x>.
- Tu, Y., Yang, H., Shu, L., Tu, W., Chen, B., 2015. A mode of government-enterprise-university-institute-employer cooperation for innovative postgraduate cultivation. *Universal J. Educ. Res.* 3 (2), 93–98. <http://dx.doi.org/10.13189/ujer.2015.030204>.
- Van, P., Berman, A., Karshmer, J., Prion, S., West, N., Wallace, J., 2015. Academic-practice partnerships for unemployed new graduates in California. *J. Prof. Nurs.* 31 (4), 351–358. <http://dx.doi.org/10.1016/j.profnurs.2015.02.005>.
- Vassie, L., Fuller, C., 2003. Assessing the inputs and outputs of partnership arrangements for health and safety management. *Employee Relat.* 25 (5), 492–503. <http://dx.doi.org/10.1108/01425450310490183>.
- Warner, J.R., Burton, D.A., 2009. The policy and politics of emerging academic-service partnerships. *J. Prof. Nurs.* 25 (6), 329–334. <http://dx.doi.org/10.1016/j.profnurs.2009.10.006>.
- Waters, S.E., Brigden, J.J.C., 2013. Assessing the community partner in academic service-learning: a strategy for capacity-building. *PRISM* 2 (2), 1.
- Whittemore, R., Knaf, K., 2005. The integrative review: updated methodology. *J. Adv. Nurs.* 52 (5), 546–553. <http://dx.doi.org/10.1111/j.1365-2648.2005.03621.x>.
- Xippolitos, L.A., Marino, M.A., Edelman, N.H., 2011. Leveraging academic-service partnerships: implications for implementing the RWJ/IOM's recommendations to improve quality, access, and value in academic medical centers. *ISRN Nurs* 2011. <http://dx.doi.org/10.5402/2011/731902>.
- Ylikoski, T., Kortelainen, M.J., 2012. A new approach for managing university-workplace partnerships. *Ind. Commer. Train.* 44 (6), 349–356. <http://dx.doi.org/10.1108/00197851211254798>.
- Zamanzadeh, V., Irajpour, A., Valizadeh, L., Shohani, M., 2014. The meaning of collaboration, from the perspective of Iranian nurses: a qualitative study. *Sci. World J.* 2014. <http://dx.doi.org/10.1155/2014/785942>.
- Zhang, Y., Wildemuth, B.M., 2016. *Applications of Social Research Methods to Questions in Information and Library Science*, 2nd ed. Pearson Education, Oxford.