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Research Article

Investigating Basic Requirement Regulations, Internal Environment,and their Impact on Performance of Retirement Homes

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Abstract

Due to an increase in the number of the aging population in Malaysia, the need for retirement homes to cater to the demands of the aging population has become very challenging. Hence, the aim of this paper is to scrutinize the association between retirement home internal environment (RHIE), basic requirement regulations (BRR) of retirement homes, and retirement home performance (RHP). For the pilot study, 50 subjects were selected to fill out the questionnaire and reliability analysis of the items in the questionnaire was run. The findings of the pilot study depicted that the items were highly reliable. Following this, 400 questionnaires were distributed equally to four retirement homes in Selangor, Johor, Kelantan, and Kuala Lumpur (with 100 questionnaires to each retirement home). Out of this figure, 210 subjects responded to the survey; however, only 205 were complete and used for the study. The findings indicated that there was a significant association a) between RHIE with RHP; b) between BRR with RHP; and c) between RHIE and BRR. Most of the tenants agreed that RHIE should have elderly-centric treatment, good relationship between the elderly and professionals, and adequate daily activities. The tenants also agreed that BRR should ensure that transport and medical assistance, a multi-purpose card for the elderly, and a supply of food bank be provided for the elderly. The retirement home tenants agreed that RHP depends on the increase in the number of tenants and check-in, food quality as well as facilities, and availability of equipment for basic health screening. The findings of this study have implications for enhancement of government-operated or privately-owned retirement homes.

***Keywords*:** Retirement Homes; Internal Environment; Basic Requirements; Performance

1. Introduction

This section discusses the background of the study, problem statement, and objectives of the study.

1.1. Background of the Study

The elderly population in Malaysia was expected to increase by 210% from the year 1990 to 2020, whereby the elderly aged 60 would rise from 1.05 million in 1990 to 3.26 million in the year 2020 (Mahidin, 2017). Hence, the silver-haired population is expected to be 5.1 million by the year 2030 (Department of Statistics Malaysia 2018).

According to a summary report reviewing life expectancy at birth of the Malaysian population, it continued to rise over the past decade to reach 74.7 years in the year 2016 as compared to 72.2 in the year 2000, hence implying that more people will live longer in the future. Therefore, the Malaysian government should be aware of and cater to the needs of the 'silver-haired' society in Malaysia in terms of long term and day-care facilities (Mahidin, 2017).

1.2. Problem statement

There is no uniformity in terms of services provided by retirement homes operated by government, private, and non-profit organizations. Hence, it is timely that research be conducted to investigate and determine the expectations of retirement home tenants (or occupants) pertaining to retirement home internal environment, basic requirement regulations to be enforced on retirement homes, and retirement home performance (RHP) in Malaysia.

1.3. Purpose of this paper

This paper aims to discuss the relationships between retirement home internal environment (RHIE), basic requirement regulations (BRR) of retirement homes, and retirement home performance (RHP). Subsequently, the elements regarded as critical for optimum RHP as gathered from the perceptions of tenants are also investigated to further improve the existing retirement home services and operations in Malaysia.

2. Literature Review

This section briefly discusses the statistics of the silver-haired population at retirement homes in Malaysia. Besides, a description of the variables under study, namely, retirement home internal environment (RHIE), basic requirement regulations (BRR) of retirement homes, and retirement home performance (RHP) are discussed. The theory, hypotheses and framework of the study are proposed in this paper.

2.1. Retirement homes

In Malaysia, there are two types of retirement homes which are the Ambient-Assisted Living Concept, and Long-Term Retirement Home Concept. The description of these concepts are as follows:

1. The Ambient-Assisted Living Concept (AALC): It is a

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low and middle-income retirement home concept that is aimed at reducing the dependency on the caregiver and built upon independent-living based on a residential care concept. It combines new technologies and social environment in improving the quality of elderly life (Shaw, Rosen, & Rumbold, 2011).

2. Long-Term Retirement Home Concept (LTRHC): Unlike AALC, LTRHC is faced with challenges in finding support, funding, donation, and sponsorship to sustain its operations. Most of the NGOs or non-profit organizations need to look for sponsorship or funding from the corporate sector to finance its daily activities, treatment, and medication. LTHRC is established to fulfil the basic needs of daily living including accommodation, food and medication, whereas the AALC's main focus is to utilize intelligent technology to allow elderly people to live independently for as long as possible (Yip, 2017).

2.2. Elderly population in malaysia

World Health Organization (2018) has predicted that about 1% of the population in most developing countries will be suffering from disabilities. The Malaysian population has increased to 28.6 million in the year 2010 and is expected to increase by 31% that is with a total population of 37 million by the year 2030 and may reach 40 million by the year 2050. The Malaysian population aged above 60 has increased from 1.45 million in the year 2000 to 2.25 million in the year 2010. The elderly population is expected to be 5.1 million by the year 2030 (Department of Statistics Malaysia 2018). Hence, retirement homes should be prepared way ahead to cater to this category of population.

Most of the Malaysian elderly will get funds and support from their adult children and may reside with them. However, those without children or being single will opt to reside in retirement homes. Interestingly, most of the elderly in Malaysia are educated and wealthier in contrast to those 20 years back (Momtaz et al., 2011). Hence, a combined retirement home concept that integrates both the AALC and LTRHC should be made available in Malaysia to cater to all the elderly.

In Malaysia, the social welfare services are divided into two (2) types, namely, external services and institutional services. These services provide for the poor elderly in terms of accommodation, medical treatment, counselling, guidance, occupation, rehabilitation, recreation, and religious facilities (Li & Khan, 2012). This study purports to determine the inter-relationship between elements that are critical for retirement homes, that is in terms of internal environment of retirement homes, their basic requirement regulations and retirement home performance in Malaysia.

2.3. Internal environment of retirement homes

This section discusses the availability of skilled caregivers, 24-hour professional and ambulance services, and an integrated database system at retirement homes. Caregivers or nurses should be qualified and skilled enough to ensure the tenants or occupants get proper attention and services to ensure enhancement of tenants' health and overall well-being at these homes (Ellis & Rawson, 2015; Casey et al., 2016). The disabled elderly usually requires 24-hour per week close attention and monitoring. Hence, a well-trained caregiver or nurse is required to undergo specialised training to prepare herself in providing aid and support to the tenants or occupants to ensure that tenants acquire the best quality in terms of services (Li & Khan, 2012). Retirement homes should be installed with a medical aid box and phone line in every room to ensure immediate accessibility to caregivers during emergencies and /or when accidents occur within the vicinity. Furthermore, these homes need to be equipped with an emergency button which can alert the 24-hour ambulance services when the necessity arises (Hanif et al., 2018). It is a requirement for tenants of retirement homes to have a good relationship with professional healthcare caregivers (Kandel & Adamec, 2013).

2.4. BRR

Despite the facilities and services for elderly care towards better living, there should be a significant change in the act, rules, policy, programme and delivery mechanisms from a welfare approach to a new self-development efficient agency approach to ensure that the elderly are active physically, mentally, and socially and become healthier and independent (KPWKM, 2014). The government policy in Malaysia encourages voluntary bodies to provide care for the elderly and these organizations will be assisted through grants to provide community services to the elderly. With the inclusion of social care, it will lessen the costs of hospitalization and readmission. In social services and community care in Malaysia, the family and community play a major role, while in the welfare state approach, the responsibility is undertaken by close friends, family and community; on the other hand, institutional care like nursing homes are normally available to people who have the means and can afford it (Li & Khan, 2012).

A database system with personal information as tenants' biodata, emergency contact details, medical record data on ailments and medication received thus far should be made available to caregivers when needed. Hence, cloud computing should be utilized to keep all records for easy access whenever possible (Chang et al., 2019; Karaca et al., 2019). The basic needs of accommodation for the elderly include basic healthcare and medical equipment, home appliances and private bedroom, kitchenettes, room for the elderly to dine in as well as the shower room and toilet facilities. Moreover, retirement homes should be kept germ-free, with facilities in proper condition and well-designed for tenants' convenience, while vehicles should be in proper condition and made available during emergencies (Tan & Lee, 2018; Hanif et al., 2018**).**

Due to budget constraints in hiring medical specialists, it has become a trend for retirement homes to mobilise external treatment providers that are equipped with healthcare professionals or doctors, and nurses. This practice allows cutting down on operation costs, and the tenants will get benefits by establishing relationships with

efficient external health providers (Dzissah et al., 2019; Woll, & Bratteteig, 2019; Chang et al., 2019).

2.5. RHP

Substantial past literature stated that there are two types of RHP which are the occupants or tenants and facilities. RHP is evaluated based on the tenants' happiness index which involve the provision of services, activities conducted, and the increase in the enrolment of tenants which results in increased social interaction in the retirement homes among the elderly (Slettebø et al., 2017; Mjørud et al., 2017), and an increased number of caregivers and retention of existing employees (Kandel & Adamec, 2013), the facilities, food, and services quality (Hanif et al., 2018), availability of equipment for screening health (Hanif et al., 2018; Tan, & Lee, 2018), and caretakers with adequate skills (Kandel & Adamec, 2013). Due to loneliness or the needs for social contact, and the needs to be updated with the latest information, internet access at retirement homes is used as an indicator for measurement of performance of retirement homes (Hanif et al., 2018).

Findings from a study on private retirement homes suggest that the quality of life of tenants is dependent on outdoor leisure, and social support (Onunkwor, et al, 2016). Most of the tenants or the elderly at retirement homes are lonely and some of them suffer from depression, hence frequent communication with caregivers is essential to overcome their loneliness. In addition, some of the tenants or occupants had communication disabilities that require well-trained caregivers to skilfully handle communication barriers between themselves and tenants (Forsgren et al., 2016). As most of the tenants or occupants require social bonding with caregivers, it is vital that caregivers communicate effectively with the elderly (Casey et al., 2016).

Malaysia will have almost 9% or almost 3 million elderly people out of the 40 million estimated population in the year 2021 (DOSM, 2016). In Malaysia, it was reported that the loneliness rate of elderly Malays are increasing at a 20 % rate annually (Kehusmaa et al., 2012). Hence, it is crucial to ensure that meaningful daily activities at retirement homes are conducted to create and promote happy interactions and energise tenants to prolong the lives of the elderly (Slettebø et al., 2017). In developed countries like Europe, USA, Japan, Australia and Singapore, social care includes activities which assist in providing the needs of daily living as well as protection or support services focusing on preventive, rehabilitative and community care (Bäck & Calltorp, 2015).

2.6. Vroom's expectancy theory of motivation

The theory used to explain the current study is Vroom's Expectancy Theory of Motivation, whereby the elements are expectancy (perceiving efforts lead to good performance), instrumentality (belief that there is a connection between activity and goal), valence (how the reward is valued), and motivation (reason to perform). Most studies apply Vroom's Expectancy Theory of Motivation to study employee behaviour for retention purposes; however, in this study, the theory is applied to gather feedback from the perspectives of patients receiving treatment (Yoes, & Silverman, 2021).

Hence, in this study the expectancy can be seen from RHIE perspective, in terms of how much effort is being put in by the retirement home operators to establish the premise, while instrumentality can be referred to how the tenants or occupants perceived efforts taken by the caretakers and operators to achieve the goals of tenants staying at the retirement homes. Consequently, this is related to the valence in terms of how tenants evaluate whether the retirement homes fulfilled their expectations. If the retirement homes exceed or meet their expectations, they will most probably stay longer and might indirectly promote the services to their friends and family. However, if the performance of the retirement homes does not meet their expectations, they might leave and might not promote the services to their friends and family. Hence, Vroom's theory is used as the underpinning theory of this study.

2.7. The Relationship Between RHIE, BRR, and RHP

Profit in homecare is impacted by the integrated relationship between the operational activities, social resources, clients, and the management. The outcomes of this integration of factors include minimal operation costs, and training to upgrade caregivers for long term care services with the objective to enhance performance of retirement homes. Customer relationship management enhances caregivers' performance which in turn enhances retirement home performance. Hence, pleasant workplaces for the elderly are essential to promote caregivers to perform effectively and efficiently towards the goals of the retirement homes. The facilities as mentioned above are elderly-friendly; thus, these facilities contribute towards retirement home performance. Besides, medical treatment and standby medication at the retirement homes project a positive image of the home (Ellis, & Rawson, 2015; Casey et al., 2016; Forsgren et al., 2016).

The financial factor whereby the management of the organization should be equipped with proper financial management has a direct effect on performance. Proper financial management requires a comprehensive system software despite the existence of skilled accounting and finance executives. SQL accounting and payroll and a healthcare management system provide a comprehensive record of healthcare, medical record, and treatment of the elderly. Total Care and Cost Improvement Program model, includes enhanced payments for primary care, significant financial incentives for primary care physicians in controlling spending, and care coordination tools in supporting progress towards the goal for low cost and high-quality care to ensure the sustainability of the operations of home care. The items of external resources including the technological resources have a mediating or indirect effect on the BRR for older persons, which in turn has an impact on performance (Afendulis et al., 2017).

In retirement homecare, social support resources have an indirect effect on funding structures as these resources help cut the costs of human resources. Social support resources include psychological, physical, and social

support to the tenants such as multiple need care, and complex need care that consequently increases operational costs. Nurses are significantly influenced by ICTs, specifically in managing patient care, documentation, competencies and skills, nurse-patient relationship, assessment, care planning, and evaluation, patient comfort and quality of life related to care (Rouleau et al., 2017). Technologically improvised personnel practices enhance direct care processes, outcomes of treatment and workplace environment (Zuzelo et al., 2008).

The challenges in integrated social home care model are finding multiple sources of funding for considerable impediments as well as to obtain long-term funding and financial support for retirement home care. The operators of home care should take their own initiatives to find alternative ways of funding from other sources to bear the costs of operations and personal pocket money for occupants (Lin et al., 2018). The prediction rates for the charges of private nursing homes in Malaysia starts from RM 3,500 per month in 2018 that is, almost a decade after 2010, and this excludes medical treatment and other recurring expenses. By 2019, the prediction rate for private nursing homes is above RM4,000 per month (Lin et al., 2018). Therefore, an alternative option for an affordable and desirable system is urgently required for the needy elderly to fall back on. It is also part of the social responsibility of the nation to provide adequate assistance for the elderly even though numerous policies have been implemented by the government to cater for the betterment of the aged society.

Apart from that, government grants, funds, subsidies, and support also have a direct impact on performance of the organization. Adequate multi-sources of funds provided by different sources by the government, corporate or private sectors and individuals can also help improve the performance of organizations. In health and social care community, no financial instruments would cover the care-giving life completely, therefore the operators should have multiple resources of financial support to sustain the daily activities in home care (Lin et al., 2018). Finding and sustaining the funds is another challenge. Therefore, alternative and multi-sources of funding should be made available in case of short of cash flow and funding for daily operational activities.

The two (2) multi-sources of funding emphasized in this study include:

a) Corporate, private, and individual crowd funding
b) Employee provident Fund, Pension, Government grants and subsidies and Self-Effort source of income

Long term public homecare in Malaysia provides treatment and protection for the chronically-ill elderly and such treatment often requires sophisticated healthcare equipment besides other facilities which include professional treatment, counselling, physiotherapy, spiritual and religious support (Lim & Hayat Khan, 2012). The other need for sophisticated healthcare equipment is the need for geriatric professionals, equipment, and devices of healthcare, and geriatric drugs and pharmaceutical and the assistive and adaptive devices. The Medicaid of Long-term financial credit provided by private suppliers will assist long term retirement equipment financial credit facilities. Furthermore, the Medicare of Long-Term Care Insurance benefits the custodial care in a nursing home in all states. The entire multi-sources of funding include private, corporate and personal funding which decreases the burden of the individual and organization and this may be helpful to the occupants of retirement homes.

RHIE refers to the elderly friendly accommodation, effective and efficient home appliances, kitchenettes, basic equipment for health screening, and medication for emergency purposes. Meanwhile, the availability of medical treatment is required to fulfil BRR. The items of external resources which include the technological resources have a mediating effect on BRR for older persons, which in turn has an impact on performance (Ellis, & Rawson, 2015; Casey et al., 2016; Forsgren et al., 2016).

Nurses are significantly influenced by ICT specifically in managing patient care, documentation, competencies and skills, nurse-patient relationship, assessment, care planning, and evaluation, patient comfort and quality of life related to care (Rouleau et al., 2017). Technologically improvised personnel practices can help enhance direct care processes, the outcome of treatment and workplace environment (Zuzelo et al., 2008).

Social caregivers and social physical resources provided by the corporate and private companies fulfil the necessities such as facilities in social home care. This includes the treadmill for the elderly, static gym-cycling, belt vibrator and all healthcare equipment to measure blood pressure, sugar level and cholesterol level. Despite the increase in costs of training and development, it may result in decrease in costs of operations and improve the performance of the organization. The Integrity Home Care in Cleveland, Ohio, reported that among Structure and Function, Activity, and Social Participation, the training and development of social resources improvise the performance of organizations (Bonder & Bello-Haas, 2017).

Based on the above-mentioned discussion, the following hypotheses are deduced:

H1: There is an association between RHIE and RHP.
H2: There is an association between BRR and RHP.
H3: There is an association between the RHIE and BRR.

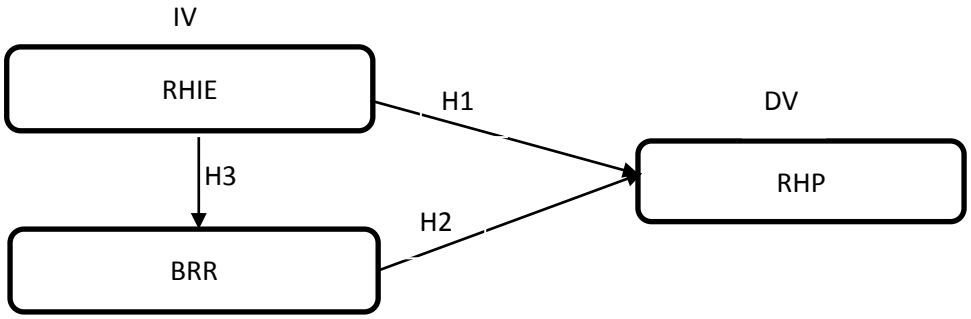

Fig. 1. Theoretical Framework of the Study

3. Methodology/Materials

This section discusses the data collection method and sampling, questionnaire development, pilot study, and ethical issues addressed in protecting the privacy of the respondents.

3.1. Data collection, and sampling

400 questionnaires were administered to four retirement homes in Selangor, Kelantan, Johor, and Kuala Lumpur with 100 questionnaires to each retirement home. The method used was drop and collect later. The questionnaires were distributed to each retirement home and collected after two weeks, and these were used for the pilot test. For the full data collection, it took up a duration of about two months to collect the questionnaires from the respondents. The respondents were not forced to participate in the survey, and hence only 210 questionnaires were returned while 205 were complete and hence, were used for the analysis.

3.2. Questionnaire development

The questionnaire is divided into two parts: Part A and Part B. Part A is on respondents' profile that requires respondents to provide details on gender, ethnic, age, state they hailed from, and educational background. Part B was on items for the independent variables (IV) namely, Retirement Home Internal Environment (RHIE), Basic Requirement Regulations (BRR), while the independent variable (IV) is Retirement Home Performance (RHP).

There are eight (8) items for RHIE which are RHIE1_integrated database system(Chang et al., 2019; Karaca et al., 2019; Woll, & Bratteteig, 2019), RHIE2_skilled caregivers (Casey et al., 2016; Ellis, & Rawson, 2015; Forsgren et al., 2016), RHIE3_24 hours professional and ambulance service (Hanif et al., 2018; Tan, & Lee, 2018), RHIE4_relationship between elderly and professional (Casey et al., 2016; Onunkwor, et al., 2016), RHIE5_elderly centric treatment (Hanif et al., 2018; Tan, & Lee, 2018), RHIE6_outsource mobile treatment (Chang et al., 2019; Dzissah et al., 2019; Woll, & Bratteteig, 2019). RHIE7_excellent communication (Casey et al., 2016; Onunkwor et al., 2016), and RHIE8_daily activities (Mjørud et al., 2017; Slettebø et al., 2017).

There are six (6) items for BBR which are as follows: BRR1_efficient and effective management (Lim & Hayat Khan, 2012), BRR2_collaboration with public professional healthcare (Dzissah et al., 2019; Woll, & Bratteteig, 2019; Chang et al., 2019), BRR3_integrated database (Chang et al., 2019; Karaca et al., 2019), BRR4_food bank supply, BRR5_multiple purpose card, and BRR6_transport and medical support (Dzissah et al., 2019; Woll, & Bratteteig, 2019; Chang et al., 2019).

There are eight (8) items for RHP which are RHP1_family members happy (Casey et al., 2016; Onunkwor et al., 2016), RHP2_increased number of employees (Mjørud et al., 2017), RHP3_activeness and happiness (Slettebø et al., 2017), RHP4_increase in number of tenants (Kandel & Adamec, 2013), RHP5_quaity food and services (Hanif et al., 2018), RHP6_basic health screening equipment (Hanif et al., 2018; Tan, & Lee, 2018), RHP7_internet connection (Hanif et al., 2018), and RHP8_activities and programmes (Kandel & Adamec, 2013).

3.3. Pilot Study

This section briefly discusses the reliability analysis and the respondents' profiles for the pilot test. The responses of 50 respondents who completed the questionnaire were used for the pilot study.

3.3.1 Reliability Analysis

All items were reliable to be used for data collection. The results as shown in Table 1 below for items on RHIE, BRR and RHP have high reliability values, that is α is more than 0.900.

Table 1
Reliability analysis of RHIE, BRR and RHP

Factors	No. of Items	No. of Items Deleted	Total Items	Cronbach's Alpha
RHIE	8	0	8	0.902
BRR	6	0	6	0.949
RHP	8	0	8	0.943

3.3.2. Analysis of respondents' profiles

Out of 50 respondents who responded to the pilot study, 46% of them were males and 54%t were females. About 84% of them were Malays, 10% were Chinese, and 6% were Indians. Almost 80% of the respondents were aged between 44 and 55 years, and 20% of them were above 55 years old. 62% of them were from Selangor, 12% from Kelantan, 10% from Johor, and 16% from Kuala Lumpur. In terms of educational background, about 62% of the respondents had a Bachelor's degree and above, 16%

possessed STPM/Diploma, 14% had sat for SPM, and 8% had PMR or lower. Hence, the majority of them are Malays from the elderly group, with high education level, and hail from Selangor.

3.4. Ethical issues consideration

The ethical issues that were taken into consideration include getting permission from the retirement homes to conduct the study and gaining permission from the tenants to respond to the survey willingly, and not forced to participate in the study. In addition, the privacy and confidentiality of the respondents' names and contact information were observed.

4. Results and findings of the full research

This section presents the respondents' profiles, results on reliability analysis, descriptive analysis of the items for each variable, and hypotheses analysis. A brief discussion on the findings of the full research proper is also presented.

4.1. Respondents profiles

From the 205 respondents who participated in the survey, about 51% are males while 49% are females. In terms of ethnicity, 59% consists of Malays, 35% Chinese, and 6% Indians. As for age group, the majority (53%) of the respondents were aged between 56 and 70 years, followed by those (38%) aged between 44 and 55 years, and 9% of respondents who were above 70 years old. In terms of where they hail from, 41% of the respondents come from Selangor (41%), 25% from Kelantan, 21% from Johor, and 13% from Kuala Lumpur. As for education level, most (35%) of the respondents possessed a Bachelor's degree or higher, 26% with STPM or Diploma, 20% with PMR, 17% with SPM, and 2% with no formal education.

4.2. Results- reliability analysis, descriptive analysis and hypotheses analysis

A brief discussion on reliability analysis, descriptive analysis, and hypotheses analysis is presented below.

4.2.1. Reliability analysis

Reliability analysis was carried out to determine whether all items were reliable for this study. Out of 205 respondents, the results in Table 2 below indicate that reliability is high for all items with α or Cronbach's Alpha value more than 0.800. The highest mean obtained is for RHIE followed by RHP and BRR.

Table 2
Reliability Analysis of RHIE, BRR and RHP

Factors	Number of Items	Number of Items Deleted	Total Items	Cronbach's Alpha	Mean	Variance	Std. Deviation
RHIE	8	0	8	0.828	23.1073	23.332	4.83028
BRR	6	0	6	0.877	22.7317	18.795	4.33536
RHP	8	0	8	0.855	28.3610	24.575	4.95731

4.2.2. Descriptive Analysis

In terms of RHIE, the findings show that all items have a mean score exceeding 3.00, hence all items are considered as being important to the elderly tenants of the retirement homes (refer to Table 3 below). The five most important elements as agreed by the retirement tenants are elderly-centric treatment, daily activities, elderly-professionals good relationship, 24-hour professional ambulance services, and an integrated database system consisting of tenants' medical data.

Table 3
Descriptive Statistics for RHIE Items

Items on RHIE	Mean	Std. Deviation	N
RHIE1	3.4293	0.8807	205
RHIE2	3.3659	0.9382	205
RHIE3	3.5854	0.9122	205
RHIE4	3.6341	0.8562	205
RHIE5	3.6732	0.7768	205
RHIE6	3.3951	0.9367	205
RHIE7	3.4098	0.8900	205
RHIE8	3.6146	0.9716	205

As shown in Table 4 below, the BRR descriptive analysis shows that most of the retirement home tenants agreed that all the items are important. However, the five most important elements related to Retirement Home Regulations are transport and medical support availability, a multipurpose card for the elderly, food bank supply, an integrated database which is accessible to the public, and effective and efficient management of activity space at retirement homes.

Table 4
Descriptive Statistics for BRR items

Items on BRR	Mean	Std. Deviation	N
BRR1	3.6585	0.8691	205
BRR2	3.5512	1.0211	205
BRR3	3.6732	1.0597	205
BRR4	3.7707	0.9451	205
BRR5	3.9268	0.8853	205
BRR6	4.1512	0.8975	205

In terms of RHP as shown in Table 5 below, the results indicated that all items are important as agreed by the tenants of the retirement homes. The five most important items or indicators for RHP are increase in the enrolment of tenants/check in, quality of food and facilities, basic health screening equipment, activities, and programmes that are available at retirement homes, and availability of internet connection at retirement homes.

Table 5
Descriptive Statistics for RHP items

Items on RHP	Mean	Std. Deviation	N
RHP1	3.4537	0.8711	205
RHP2	3.3268	0.8942	205
RHP3	3.4976	0.8496	205
RHP4	3.6829	0.8177	205
RHP5	3.6146	0.8122	205
RHP6	3.6049	0.8660	205
RHP7	3.5756	0.7862	205
RHP8	3.6049	0.8660	205

4.2.3. Hypotheses analysis

This section describes the results of Pearson Correlation analysis to explain the relationship between variables. The variables are BRR (mean= 3.7886; standard deviation= 0.72256), RHP (mean = 3.5457; standard deviation=0.62055), and RHIE (mean= 3.5134; standard deviation= 0.60378). The highest mean is BRR followed by RHP and RHIE (Table 6).

The results of Pearson Correlation analysis (refer to Table 7) indicate that there is a very strong relationship between RHP and RHIE (*r= 0.796**; p=0.000*), and a moderate relationship between BRR (*r=0.633**; p= 0.000*). RHIE and its relationship with BRR is moderate (*r=0.541**; p=0.000*). As such, H1, H2, and H3 are accepted.

Table 6

Descriptive Statistics for RHIE, BRR and RHP

	Mean	Std. Deviation	N
RHIE	3.5134	0.6038	205
BRR	3.7886	0.7226	205
RHP	3.5451	0.6197	205

The strongest correlation exists between RHIE and RHP, and BRR and RHP, the lowest correlation is between RHIE and RHP as shown in Table 7 below. Figure 2 illustrates that the strongest relationship is between RHIE with RHP, followed by BRR with RHP, and a moderate relationship between RHIE and BRR.

Table 7

Pearson Correlation Analysis of RHIE, BRR and RHP

		RHIE	BRR	RHP
RHIE	Pearson Correlation	1	0.541**	0.797**
	Sig. (2-tailed)		0.000	0.000
	N	205	205	205
BRR	Pearson Correlation	0.541**	1	0.636**
	Sig. (2-tailed)	0.000		0.000
	N	205	205	205
RHP	Pearson Correlation	0.797**	0.636**	1
	Sig. (2-tailed)	0.000	0.000	
	N	205	205	205

***. Correlation is significant at the 0.01 level (2-tailed).*

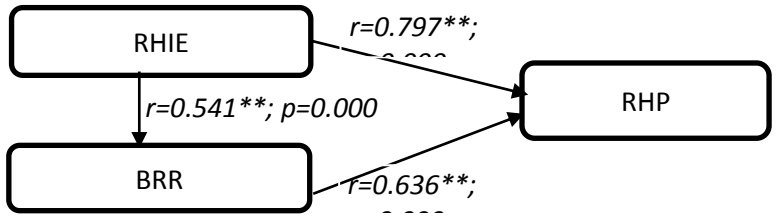

Fig. 2. Relationships between IE, BRR, and RHP

4.3 Findings

The findings are in line with previous study findings which indicated that BRR and RHIE are critical for RHP. The important elements for RHIE are the elderly-hospital professional relationships, elderly-centric treatment, and 24-hour professional ambulance services (Tyvimaa, 2011). The important elements for BRR related to retirement homes are collaboration with NGOs pertaining to transport and medical assistance, a multipurpose intelligent card for the elderly, and foodbank supply (Shaw, Rosen & Rumbold, 2011). The important elements for RHP include the increase in the number of new check-in and retained elderly, quality of food and facilities, and health screening equipment (Refer to Figure 3).

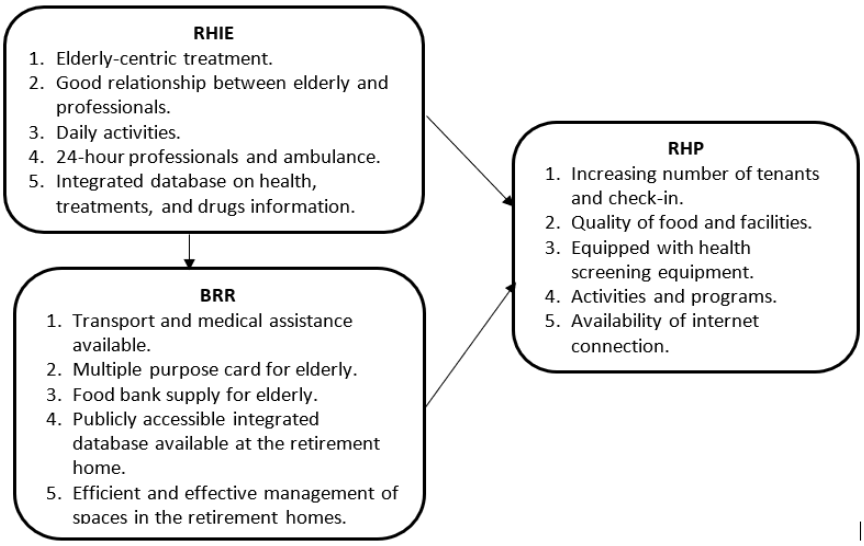

Fig. 3. Relationship between RHIE, BRR, and RHP

5. Conclusion

In summary, the relationships among RHIE, BRR, and RHP are direct and significant. Hence, all three hypotheses were accepted. It was noteworthy to emphasize the five most critical elements for RHIE which consists of a good relationship between the elderly and hospital professionals, elderly-centric treatment to keep the elderly fit and active besides being happy, an integrated database system containing information on tenants' treatment and medication, as well as 24-hour professional ambulance services.

BRR related to the retirement homes are availability of transport and medical assistance, a multi-purpose card, and food bank supply for the elderly, a publicly accessible integrated database at the retirement home, and efficient and effective management of spaces in the retirement homes. RHP was measured by the increase in the number of new check-in and retained elderly, quality of food and facilities, health screening equipment, caregiver skills in creating and organizing activities, and available internet connection.

To conclude, RHIE, and BRR need to be streamlined to ensure that the RHP is aligned with the expectations of the tenants or occupants of retirement homes. The findings of this study have implications for enhancement of RHP and its RHIE for the benefit of its tenants while adhering to the basic requirement policy set by the government.

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