



Doctor Patient Relationship as a Mediator between Attachment Dimensions and Self-Management in Chronic Patients, Myanmar

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Abstract

The main objective of the current study was to investigate the direct and indirect influences of attachment dimensions on self-management, being mediated by the doctor-patient relationship. To meet this objective, a quantitative study with correlational research design via path analysis multiple regression was utilized to establish statistical associations between the core variables. The participants of the study consisted of 90 male and 90 female chronic patients who suffered from cardiovascular disease, chronic respiratory disease, and diabetes in Yangon, Myanmar. Three sets of questionnaires were employed: Burmese translated version of Revised Adult Attachment Scale (RAAS) to test close, depend and anxiety attachment dimension, Partners in Health (PIH) scale to measure self-management and Patient-Doctor Depth of Relationship (PDDR) to test the doctor-patient relationship. The results revealed the following major findings:

- i. Close attachment dimension had a significant direct effect on self-management;
- ii. Depend and anxiety attachment dimensions did not have a significant direct effect on self-management;
- iii. Close attachment dimension has a significant indirect effect on self-management, being mediated by doctor-patient relationship;
- iv. Depend and anxiety attachment dimension did not have a significant indirect effect on self-management, being mediated by doctor-patient relationship.

Introduction

Mc Dermott, Cheng, Wright, Browning, Upton & Sevig (2015) explained that according to attachment theory, repeated interactions with early caregivers generalize into cognitive working models of self and others [1]. Mc Williams (2018) stated that there are positive associations between indicators of attachment insecurity and poorer patient-physician relationship quality. According to the CDC, self-management is an essential factor in supporting positive health outcomes (Centers for Disease Control & Prevention, 2018) [2]. Self-management is highlighted not only as an important strategy in treating chronic conditions but also as an effective paradigm across preventive primary, secondary and tertiary care [3]. Cheng, Fu, Liang, Wei, He & Bai (2019) conducted a study among the rural patients in China and the finding shows that self-management influences the quality of life of patients with symptomatic valvular heart disease. Furthermore, a research study in Germany by Brenk-Franz, Strauss, Tiesler, Fleischhauer, Schneider & Gensichen (2017) reported that the patient-provider relationship is associated with a range of health-related outcomes and self-management skills. In fulfilling health decisions, self-management plays as a shared responsibility [4]. This means that a doctor-patient partnership has to be built, in which the patient and the doctor occupy equal positions and co-operatively work together [5]. To succeed in self-management, the patient needs to master the skills such as goal setting, activity pacing, relaxation, thought challenging, positive self-reinforcement, self-monitoring, problem-solving, decision-making and resource identification [6]. Anger and frustration are the emotions that the chronic patients have to be dealt with. The emotional consequences and the impact of chronic conditions are everyday tasks for patients throughout their entire life [5].

According to Danquah (2013), the illness itself has been a trigger for the attachment needs of patients [7]. Brenk-Franz et al (2017) indicated that attachment dimensions are related to self-management through doctor-patient relationships among patients with multiple chronic conditions [4]. A few studies have suggested different social and psychological factors that can promote self-management such as perceived quality of doctor-patient relationship [8].

Literature Review

Attachment dimensions

Attachment theory has been used as one explanation for the conditions around chronic illness (McWilliams, 2018). The way the chronic patients feel and behave when stressed by the disease and how the distress is managed by the professional can be explained by attachment theory [9]. Adult Attachment Style (AAS) is considered to help discriminate the three distinct attachment styles "secure", "anxious-avoidant" and "anxious-ambivalent". "Close" and "Depend" subscales are composed of anxious-ambivalent style; ambivalently attached people are not in favor of depending on others and keeping the distance from others whereas less ambivalent ones show high scores on these subscales. The subscale "Anxiety" – with high values indicating less security in the attachment – discriminated securely attached participants from the two other styles [10]. 3 dimensions are described as feelings about closeness (Close), feelings about the dependability of others (Depend) and feelings about being abandoned (Anxiety) [11, 12]. 3 dimensions' measure of adult attachment is developed from the Bartholomew's 4 category model by Collins and Read [13]. These include the desire for close contact with the attachment figure (close dimension), expectations & beliefs of availability and emotional responsiveness of a partner (depend dimension) and the confidence that an individual keeps being in love with a partner (anxiety dimension). People who are comfortable with closeness and able to depend on others tend

to be expressive and greater feeling of social confidence [13].

Brenk-Franz et al (2017) reported that anxious individuals prone to catastrophizing symptoms and exaggerating their support needs [14]. Anxious attachment is associated with elevated blood pressure during social interactions [15]. The anxious attachment has significant positive associations with chronic pain, stroke, heart attack, high blood pressure, and ulcers [16]. Anxious attachment is negatively associated with self-efficacy which is a cognitive component of self-management. Patients with higher scores of anxious attachments tend to be lack of long-term illness management skills and see themselves as ill-equipped to cope with potentially stressful events [17]. It has been indicated that the association between anxious attachment and other forms of chronic pain remained statistically significant. Anxious attachment may be an additional risk factor for ulcers [16].

Self-Management

Self-management is the internal controlling capacity of an informed and autonomous person to be able to live with the medical and emotional consequences of chronic conditions in working together with social network and the healthcare provider [5]. One study result indicated that chronic disease management provides a holistic care approach for people living with chronic illnesses [18]. It has been reported that common barriers to self-management include a lack of awareness, physical symptoms, transportation, and the cost/lack of insurance coverage [19]. Self-management has a key part for patients with chronic conditions and it can be viewed as the ability of patients to manage their problems actively and independently and to pursue their goals [4]. Self-management education help patients manage the negative psychological effects of diseases and reduce the need for medical care [20]. It has been indicated that Self-Management Education (SME) helps reduce symptoms and improve quality of life (Centers for Disease Control & Prevention, 2018). In the Journal of behavioral medicine, habit strength is highlighted as crucial in self-management [21]. Physical exercise is an important self-management strategy for patients with mental illness [22]. Self-management encompasses the medical, role and emotional domains [5,19,23]. The researchers have stated that forming doctor-patient relationships, problem-solving, decision making, resource utilization are essential parts of self-management [24].

Doctor Patient Relationship

The vulnerability of being a patient creates a need for attachment to a caregiver and attachment theory may explain patients' need to see a regular GP. This need is activated in adults when they are sick or scared [25]. The relational dimension of the concept of care continuity is understood as the patient attachment to a family physician. It is also rooted in a formal or informal contract between patients and their physicians and implies a sustained partnership and strong interpersonal relationship [26]. Understanding the interpersonal aspects of a doctor-patient relationship can be of benefit towards the major chronic condition [27]. The doctor-patient working partnership gives researchers and health care professionals with a construct that combines cognitive and affective dimensions in the relationship in medical care. The working alliance is positively associated with patient adherence, satisfaction, and improved patient outcomes [28].

Attachment Dimensions and Self-management

Patients score high on anxiety scale tend to focus on threatening situations which lead to the perception of more risks [4]. It has been indicated that the association between anxious attachment and other forms of chronic pain remained statistically significant. Anxious attachment may also be an additional risk factor for ulcers [16]. There is an association between attachment anxiety & avoidance and self-management skills & behaviors in patients with diabetes, hypertension and at least another chronic condition [17]. According to [7] illness itself has been a trigger for the attachment needs of patients. Brenk-Franz et al. (2017) reported that anxious individuals prone to catastrophizing symptoms and exaggerating their support needs whereas avoidant patients tend to engage with self-treatment and seek information from the internet or books [4]. According to Szabo et al. (2017), avoidant attachment is correlated with subjective depression and hopelessness [9]. According to Brenk-Franz et al. (2015), two attachment dimensions; anxiety and avoidance are associated with self-management. Brenk-Franz et al. (2017) asserted that there is a linkage between attachment anxiety and impaired coping & self-efficacy whereas attachment avoidance is associated with a low level of health care use [17].

Attachment Dimensions and Doctor Patient Relationship

Health care providers (HCPs) serve secure base functions. Separation and proximity seeking, on the other hand, are more likely when patients have an insecure attachment pattern [29]. When considering relatively short-term relationships with HCP, attachment anxiety is reported that the most influential aspect of attachment and is associated with

greater communication difficulties [2]. Besides, researchers have asserted that doctor-patient relationship is associated with adult attachment style [7,30]. Physical symptoms, the prevalence of medical conditions, healthcare utilization and difficulty in the HCP-patient relationship are related to adult attachment insecurity [29]. Patients with insecure attachment; with high levels of avoidance, show poorer relationships with their doctors than those with more secure attachment. Regarding reaching out for the consultation and support from HCPs, securely attached patients face little struggle [2]. Trainee doctors' attachment styles are associated with patient communication and clinical performance [31]. Healthcare professionals would work diligently to gain each patient's and/or family's trust, thereby providing a secure haven [32].

Attachment Dimensions, Doctor Patient Relationship and Self-Management

Doctor's ability to ask questions during treatment impacts self-management in anxiety and avoidant patients [4]. Danquah (2013) found that there is a connection between adult attachment and the doctor-patient relationship [7]. One study has revealed that attachment dimensions are related to self-management through the doctor-patient relationship among patients with multiple chronic conditions. Hence, the attachment-related approach that promotes active doctor-patient communication and gives information about the treatment to the patient may improve self-management skills in patients [4].

Methodology

Path analysis via multiple regression was used in this quantitative study that utilized the correlational research design to investigate the hypothesized sequential direct and indirect effects of attachment dimensions on self-management, being mediated by self-management. The participants consisted of 90 male and 90 female chronic patients in Bangkok. The statistical program G*Power 3 was employed to determine the required sample size [33]. The self-administered survey questionnaire (in Burmese) was divided into three parts:

- i. Demographic information
- ii. Revised Adult Attachment Scale (RAAS) to test close, depend and anxiety attachment dimension [34]; (2) Partners in Health (PIH) scale (Battersby et al., 2003) to measure self-management and
- iii. Patient-Doctor Depth of Relationship (PDDR) scale to test the doctor patient relationship [35].

Conceptual Framework

Based on theoretical perspectives and findings of related studies, a conceptual framework was developed (Figure 1).

Results And Discussion

Demographic Profile of Respondents

There were total of 180 respondents of Myanmar nationality; 50% (n=90) were males and 50% (n=90) were females. .6% (n=1) were aged 18 to 27 years, 2.8% (n=5) were aged 28 to 37, 20% (n=36) were aged 38 to 47, 33.9% (n=61) were aged 48 to 57, and 42.8% (n=77) were aged 58 and above. The sample consisted of chronic patients suffered from cardiovascular disease (n=60, 33.3%), chronic respiratory disease (n=60, 33.3%), and diabetes (n=60, 33.3%). The majority of the chronic patients live with their family (n=123, 68.3%), (n=39, 21.7%) of the chronic patients are tenants, (n=14, 7.8% are house owner and the least number of chronic patients (n=4, 2.2%) live away from home.

Reliability Analysis of Scales Employed

Reliability analysis was conducted on the items that represent the six scales to maximize the internal consistency of the six measures by identifying those items that are reliable, and to remove the items that are not. Items are saved with regards to the following principle:

- i. Any item with 'Corrected Item-Total Correlation' (I-T) >.33 would be kept (.33 represents approximately 10% of the variance of the total scale accounted for), and
- ii. Deletion of an item would not lower the scale's Cronbach's alpha. It was found that the computed Cronbach's alpha coefficients for all six scales were adequate and ranged from .84 to .99. Means and standard deviations are calculated and each of the factors of close attachment dimension, depend attachment dimension, anxiety attachment dimension, doctor-patient relationship, and self-management was computed by summing across the items that make up that factor.

Means and Standard Deviations for the Five Computed Factors

Table 1: Means and Standard Deviations for the Five Computed Factors.

	Mean	S.D.	Mid-point
Close Attachment Dimension	3.66	0.52	3
Depend Attachment Dimension	3.43	0.75	3
Anxiety Attachment Dimension	1.92	0.94	3
Doctor Patient Relationship	2.89	0.82	2
Self-Management	5.06	1.62	5

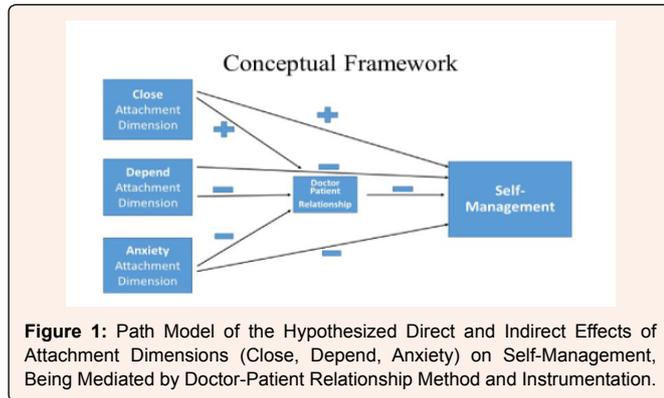


Figure 1: Path Model of the Hypothesized Direct and Indirect Effects of Attachment Dimensions (Close, Depend, Anxiety) on Self-Management, Being Mediated by Doctor-Patient Relationship Method and Instrumentation.

Table 1 presents the means and standard deviations for the six computed factors and the midpoint. It is clear that the participants of the research reported high scores on close attachment dimension and depend attachment dimension, as the mean scores were above the mid-point. At the same time, the participants reported a low anxiety attachment dimension as their mean score was below the mid-point. Besides, the respondents also have high levels of doctor patient relationship and self-management as their mean scores were above the mid-point.

Path Analysis to Test the Hypothesized Path Model

To test the hypothesized direct and indirect relationships represented by the path model (Figure 1), path analysis via regression analysis was conducted. The analysis involved:

- i. Regressing the dependent variable of self-management on the predictor variables close attachment dimension depends on attachment dimension, anxiety attachment dimension, and doctor-patient relationship;
- ii. Regressing the mediator variable of doctor-patient relationship on the predictor variable of attachment dimension (i.e., close, depend, and anxiety). The findings of analyses are mentioned in the following Figure 2.

The results showed that the respondents' close attachment dimension has a direct effect on their self-management (Beta=.23). That is, the more the respondent employed

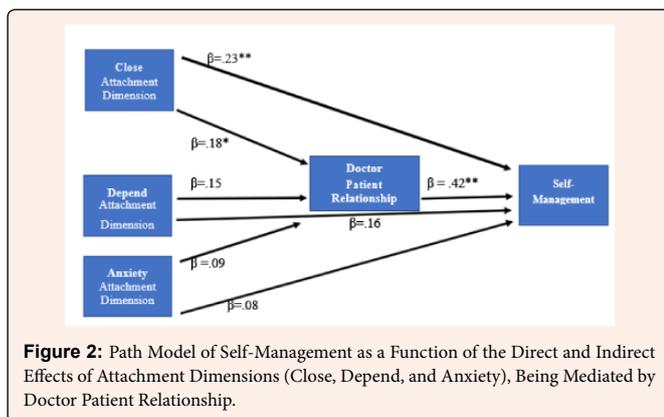


Figure 2: Path Model of Self-Management as a Function of the Direct and Indirect Effects of Attachment Dimensions (Close, Depend, and Anxiety), Being Mediated by Doctor Patient Relationship.

close attachment dimension, the higher is the respondents' level of self-management. On the other hand, depend and anxiety attachment dimensions did not have a significant direct effect on self-management. Furthermore, close attachment dimension has an indirect effect on self-management, being mediated by the doctor-patient relationship. This means that when the respondents employ more close attachment dimension, the higher will be the doctor-patient relationship (Beta=.18) and, subsequently, the higher will be their self-management (Beta=.42). Results revealed that there was no indirect effect of depend and anxiety attachment dimension on self-management, being mediated by the doctor-patient relationship. The predicted results were found to be due to several factors. As predicted, path analyses revealed that the close attachment dimension has a direct effect on chronic patient's self-management. People who are comfortable with intimacy (Close) able to adapt their behavior across situations over time [11]. Self-management cannot be pursued without the individual engagement of the patient which implies the patient's central role [5]. In addition, the attitude has been stated as a significant predictor of self-management [36].

The results of this present study indicate that the depend attachment dimension does not have a significant effect on the self-management of chronic patients. Firstly, the cultural context of chronic patients' needs to be considered. Cultural differences in beliefs about illness causation and management have linkage with self-management [8]. The results of this present study are supported by a cultural perspective. Secondly, it is not easy for some patients to manage themselves especially their health needs and they usually pursue treatment when conditions become chronic [14]. Spousal support is also a significant factor for chronic illness self-management [37]. Thirdly, the capacity to self-manage the conditions is influenced by the presence of support from family caregivers [38]. This fact implies that chronic patients can be more resilient if they would have family support and positive energy around them which helps them manage better about themselves.

The results of this present study indicate that the anxiety attachment dimension does not have significant effect on self-management of the chronic patients. Firstly, role of religion needs to be considered. Attachment anxiety is associated with self-harm [39]. However, self-harm is forbidden in Buddhism which is a major practicing religion in Myanmar. Secondly, regarding anxiety-buffering function, numbers of studies have been done with individual differences in attachment orientations and adult attachment processes [39]. Thirdly, there is a linkage between attachment anxiety and self-efficacy [4]. Anxious attachment is negatively associated with self-efficacy which is a cognitive component of self-management [17]. Lastly, it is usual to see anxiously attached individuals overly focus on possible failures [40]. These facts imply that they can be perfectionists around social and medical needs, being scared in one particular situation, treatment processes and, at the same time they can have the desire to enjoy and relax with hobbies.

Path analyses revealed that the close attachment dimension has an indirect effect on self-management, being mediated by the doctor-patient relationship. Attachment is associated with interpersonal functioning [41]. Health care providers should motivate patients to self-manage their disease to manage their stressors and to prevent the deterioration in their quality of life [42]. It is most likely that the aforementioned motivation of doctors reinforces the chronic patients in close attachment dimension and, finally, increases their doctor-patient relationship which, in turn, increases self-management. In this present study, depend attachment dimension is proven to have no indirect effect on self-management, being mediated by the doctor-patient relationship. Illness perception needs to be considered other than a doctor-patient relationship. Illness perception of patients predicts self-management behavior [43]. Wilson, Mc Naughton, Meyer & Ward (2017) mentioned that shame and feelings of failure are significant barriers to self-management [44]. For those who have more than one chronic condition, they may feel like the sufferings are their fault so that they might not seek reassurance from the doctors. Van de Velde et al (2019) explained that self-management is a shared responsibility for carrying out health-related decisions [5]. Chronic patients may face difficulties in expressing themselves in various ways; asking for help, side effects from medications (weight gain/loss, mood swings, etc.). Therefore, there can also be times when they are too sick to go to the doctor. Patients with heart failure might incorporate their religious and cultural beliefs to rationalize heart failure symptoms experienced and help them live with a chronic condition [45]. The intersecting identity of the chronic patient may also affect self-management behavior. Their reaction towards doctors and self-management can be different regarding the understanding of chronic health conditions.

Contrary to the depiction in the conceptual framework, the anxiety attachment dimension has no indirect effect on self-management, being mediated by the doctor-patient relationship. Patients were motivated for self-care by values related to personal feelings or related to individuals' life circumstances [45]. It can be reflected that the multidimensional cultural factors are important in the self-management capacity of chronic patients in Yangon. The people of diverse backgrounds with unique cultural



beliefs from other regions of Myanmar come over to Yangon for different reasons such as trading, education and health care services. Leiter, Day & Price (2015) found that attachment anxiety is strongly correlated with experienced workplace exhaustion [46]. It is suggested that economic hardship requires chronic patients to make difficult decisions between healthcare and basic living expenses. It is not uncommon for chronic patients in Myanmar to reach out to the quack doctors instead of consulting with doctors to get formal medical assistance regularly which they cannot afford. Regarding Sagala, Purba, Sitepu (2019), motivation can be an essential factor in determining belief about individual health value. There is a positive correlation between owned and received motivation and quality of life in chronic patients [47]. This means that the stronger the motivation that is own and received by patients, the better the quality of life will be and vice versa. Jaarsma et al., (2017) mentioned that family often plays a critical role in supporting patient engagement in self-care [45]. Caregivers make a vital contribution to the patient's self-care. The above mentioned studies explain the impact of culture, motivation, family, caregiver to dramatically affect the self-management of chronic patients even more than influence of the doctor-patient relationship.

Conclusion And Recommendations

The current research investigation revealed that various attachment dimensions predict self-management differently in chronic patients. In line with the theoretical framework, close attachment dimension directly affects self-management. Close attachment dimension also indirectly affects self-management through the mediating effect of the doctor-patient relationship. The findings confirm that close attachment dimension is an attachment dimension of choice to promote self-management. On the other hand, depend and anxiety attachment dimensions do not have a direct effect on self-management. Depend and anxiety attachment dimensions also do not show an indirect effect on self-management, being mediated by the doctor-patient relationship. The findings imply that depend and anxiety attachment dimensions are not the direct contributing factors to stimulate the self-management of chronic patients.

Literature suggests that the close attachment dimension is likely to correlate the doctor-patient relationship of chronic patients. However, contrary to expectations, depend and anxiety attachment dimensions do not affect self-management through the doctor-patient relationship. The result implies that depend and anxiety attachment dimensions are not an influential factor to inspire the doctor-patient relationship leading to self-management. The current research concludes that attachment dimensions differently impact on self-management. The close attachment dimension has been found to have the most positive impact on self-management of chronic patients. For these reasons, health care professionals and counselors may be guided by this outcome in facilitating the self-management of chronic patients through the doctor-patient relationship.

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