



*Special Collection: Short Report*

## **Occupational Tree of Life (OTL) Model: Addressing Adherence to Home Instruction Programs in Occupational Therapy**

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### **Abstract**

Home programs are part of occupational therapy services that improve outcomes and further increase their benefits. However, adherence to home programs can be challenging, and adherence rates range from 40-70%.<sup>1</sup> In the Filipino Occupational Therapy practice, this problem is also evident. This model aims to enable practitioners to view the occupational therapy process, specifically the factors involving adherence to home programs, and to effectively consider and address barriers and support the achievement of intended therapeutic goals. The coconut tree depicts the occupational therapy process in relation to home-based rehabilitation programs. Each part of the image corresponds to a vital element. The conceptual framework can also aid Occupational Therapists in determining the rehabilitation potential and prognosis of the client based on the factors seen

**Keywords:** *Occupation, Home-based programs, Conceptual framework, Rehabilitation*

### **INTRODUCTION**

In the latest version of the Occupational Therapy Practice Framework, Health management has been added to the list of occupations.<sup>1</sup> Health management is defined as “activities related to developing, managing, and maintaining health and wellness routines, including self-management, to improve or maintain health to support participation in other occupations.”<sup>2</sup> Home programs fall under this occupation. Home programs are “individually designed activities and exercises that intend to be a part of the client’s daily routine.”<sup>3</sup> As the group evaluated a client in compliance with one of our affiliated institution’s courses, an identified barrier to rehabilitation was their difficulty in complying with their home program due to the limited

space in their household. As the therapists brainstormed ways to address this, it showed that the said difficulty was also seen in patients previously handled. We discovered varying reasons for non-compliance, such as lack of companions to assist, lack of utilizable items, and lack of motivation. Apart from the therapists’ experiences, there is a lack of research regarding adherence in Occupational Therapy home programs in the Philippines. Data from other areas of rehabilitation are used to serve as additional evidence to the existence of the roadblock.<sup>4,5</sup>

In Occupational Therapy, practitioners use therapeutic skills such as resourcefulness,

diligence, and versatility. Therapists must be able to make the most out of available resources and incorporate them into practice for the benefit of clients. The mentioned characteristics are also the same as that of a coconut tree. Branded as the “Tree of Life,” the coconut tree and its entirety can provide the basic needs to sustain human life. It is a versatile and efficient resource. Apart from this, the coconut tree can be seen as a representation of a true-blooded Filipino and Filipino culture. Like the coconut tree, Filipinos are flexible and dynamic. These premises inspired the development of a framework that can help gain perspective in our identified clinical roadblock, which is difficulty in complying with home-based rehabilitation programs.

The coconut tree will represent the Occupational Therapy process concerning home-based rehabilitation programs within the Philippine context. This conceptual model will aid in perceiving the environmental, social, and personal factors that support and impede adherence to home-based programs—taking them into account to assist in overcoming this problem for each individual. The OTL model's core components can be used as a subjective assessment tool for occupational therapy diagnosis, identifying which activities, roles, and processes in the client's life contexts are important to them and what concerns they have about their environment. The OTL Model will also help clients establish what resources and support they have both internally and externally that can enable or hinder occupational therapy intervention.

### DEVELOPMENT PROCESS

The absence of procedure and adherence in offering home-based therapy programs led to establishing this conceptual framework since it resulted in goal misalignment and failure to improve the client's occupational involvement. Clients become so preoccupied with their lives that fitting in a home program is no longer viable.<sup>6</sup>

Clients spend more time engaged in movement-based activities when compared to rote exercises alone.<sup>6</sup> With this in mind, researchers aim to

create a model to monitor adherence in home-based rehabilitation that is both engaging and useful to our customers' overall quality of life. Researchers want clients to be interested in their lives and daily activities as they work towards their goals.

The researchers conducted a preliminary literature search to find current Occupational Therapy models and frameworks related to the premise of this model. Researchers have also obtained information and concepts from published publications and articles about home-based programs to support our identified clinical barrier.

### THEORETICAL BASES

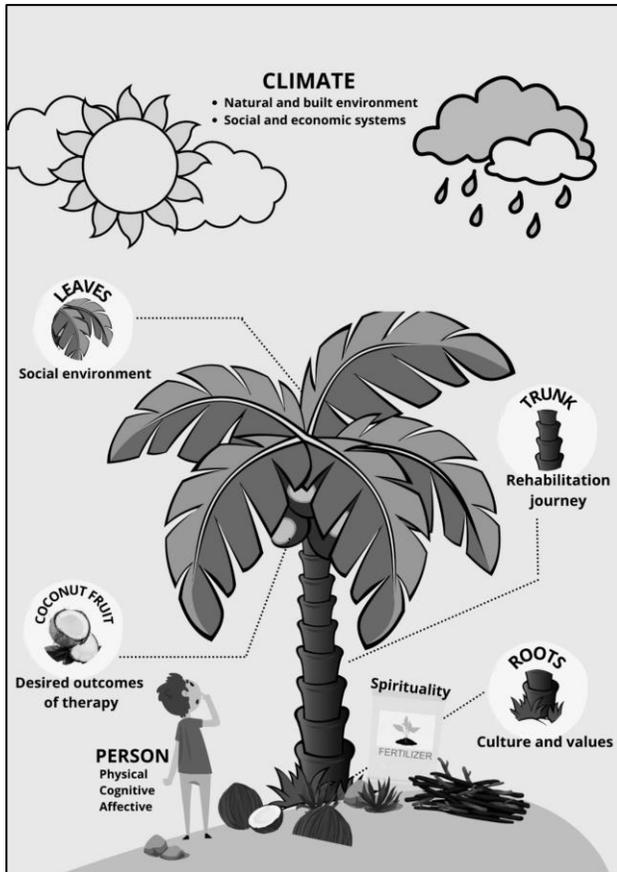
**Canadian Model of Occupational Performance (CMOP).** The client will be at the core of the model and intervention.<sup>7,8</sup> As part of the conceptual framework, researchers wish to emphasize the clients' physical (doing), emotional (feeling), and cognitive (thinking) components. This model also aims to assess the clients' and their caregivers' emotional well-being and their ability to cope with their situation's quick and long-term changes.

**Person-Environment-Occupation Performance Model (PEOP).** In a transactional relationship, this model will create a complete occupational profile of the client by understanding their view of the current situation and considering the barriers and facilitators that affect the person, environment, and occupational performance.<sup>8</sup> The focus will be on the environment component of this paradigm, or extrinsic variables, including the physical and social environment, social and economic systems, and culture and values. Learning about the client's natural and man-made settings, family relationships, and social support is critical since they significantly impact our clients' capacity to pay for therapy, modify their environment, follow home program regimens, and purchase and use adaptive equipment.

**The Kawa (River) Model.** The context and experience of the client will be significant in understanding the support and barriers to adherence in OT home programs.<sup>9</sup> This model will guide Occupational Therapists to provide

client-centered programs by enhancing the enablers in line with the client’s narrative of daily life experiences.

### CONCEPTUAL FRAMEWORK



**Figure 1.** Occupational Tree of Life (OTL) Model: Addressing adherence to home instruction programs in occupational therapy

### DISCUSSION

The OTL model necessitates a subjective assessment via an interview with an Occupational Therapist but does not require that the steps be completed in any particular order. What is essential is that the client can visualize and grasp the meaning of each element in metaphors and that they can identify themselves as the person and reach the coconut fruit as the end goal.

Clients should be able to identify their issues and concerns and explain their impact on their adherence to home programs for Occupational

Therapists to provide an approach that is oriented on the client’s daily experiences and ultimately meaningful to that person. As a result, practitioners must strive to offer the client an opportunity to express themselves freely and identify factors that affect their adherence to home-rehabilitation programs without judgment. This model aims to look at the client’s explanations for their challenges in compliance rather than for the client to follow the therapist’s perception.

#### 1. The Coconut Tree

**Trunk: Rehabilitation process (including home rehabilitation programs).** Coconut trees have a single smooth trunk. It can reach 30 meters with ringed scars. <sup>10</sup> Ringed scars help people climb the tree to get the coconut fruit. The trunk represents the client’s rehabilitation and growth from disability onset to discharge, including home rehabilitation programs. If rehabilitation is not prioritized, the trunk will weaken, stop growing and prevent the person from reaching intended goals. The client must be willing to seek therapy and see the value of rehabilitation and home-based programs. If the client has a clear understanding and is willing to engage in therapy, the trunk will get stronger and develop more ring scars, allowing them to climb up and get the fruit. The journey should help the client achieve goals and improve occupational performance from a rehabilitation perspective. The growth of the trunk is also affected by the person’s physical, environmental, and social contexts. This will be further explained in the next portions of the discussion.

**Coconut fruit: Desired therapy outcomes and goals.** Coconuts are versatile fruits; their flesh is edible, and they can also be grated and made into coconut milk. The husk can be used to make ropes, carpets, and baskets. The fruit represents the client’s desired outcomes and goals. The husk represents the proximal outcomes or short-term goals that can be attained quickly, while the coconut flesh represents the distal outcomes or long-term goals that take longer to achieve. In this concept, engagement in therapy is the source of coconut fruits. Occupational engagement, enhanced participation in desired tasks, and role competency are examples of desirable outcomes of therapy that can be set

with the client and their families during the rehabilitation process.

**Leaves: Social environment.** Like the leaves on a tree that can protect a person and a fruit from the ever-changing climate in everyday life, the model's leaves represent social contextual variables that promote or hinder the client, such as the social environment and the amount of social support. This has been adapted from the PEOP model.

The leaves protect the client from the sun's heat while climbing to get the coconut fruit. The leaves symbolize the person's relationships with others, the amount of assistance given to him, and the manner in how he receives this during home-based rehabilitation programs.

Although transitioning from hospital-based therapy to home-based programs minimizes some of the client's and family's burdens, caregiver and family stressors still contribute to the patient's non-compliance.<sup>11</sup> Changes in relationships, unanticipated disruptions in family activities, increasing care and dependence, time-consuming treatment regimens, and social isolation is some contributing causes to family stress. Non-compliance increases as these issues worsen.

When arranging and administering home exercise programs, researchers want to ensure the client and carers have the support and tools they need. Ease of participation in stress reduction by the caregiver is also a factor to consider.<sup>11</sup> The caregivers should readily understand and implement the actions or ideas to help the client reach desired outcomes.

**Roots: Culture and values.** As a tree's roots provide stability and nourishment, the roots were used in the model to represent culture and values; extrinsic components adapted from the PEOP model to show the source of motivation and basis for selecting and achieving goals.

This component is composed of tangible evidence of customs, practices, philosophies, values, norms, factual beliefs, and religious beliefs held by people other than the client.<sup>3</sup> Lack of motivation and commitment to maintaining a home-based program are attitudes and values that may serve as barriers for clients and others to adhere to OT home programs. Age, gender,

sexuality, marital status, race, language, and religious beliefs can impact client adherence to home programs. Setting realistic goals, engaging clients in fun activities, explaining the meaning and benefits of the OT home program, praising clients who adhere to the program, and talking about the impact of disability are some practices and beliefs that may enhance adherence.

## 2. The Person

**Person: Cognitive, physical, affective components.** In this model, the person illustrates the client itself. Within the person are the cognitive, physical, and affective components. These factors have been adapted from the Canadian model of Occupational Performance.<sup>8</sup> There must be a match between the three factors, namely cognitive, physical, and affective, to encourage the person to move and climb to get the coconut fruit.

The **cognitive** component is the "thinking" aspect.<sup>8</sup> Under this are attention, recall, and processing of information. This also enables the person to reason, develop ideas and solve problems.

This has been included in the model as the person's cognitive component is necessary to be able to conceptualize and identify barriers that prevent them from reaching the top and getting the coconut fruit. In line with this, adherence to home programs necessitates problem-solving, planning, and organization skills to discern and ensure that the home programs can be executed at a given moment. They must be able to navigate ways on how to deal with the hindrances to still be able to perform the activity in their natural setting given the constraints they have reported. Upon performing the activity, they must also be cautious in following safety precautions and be mindful of when to continue or stop the activity.

Therefore, we must ensure that the home instruction programs, which may be given through verbal or written instructions, in-person check-ins, visual guidance, and recorded videos<sup>11</sup> meet our client's cognitive needs. We must discern their ability to understand directions and ensure they retain them well enough to perform at home.

The **physical** component is the “doing” aspect.<sup>8</sup> This encompasses the sensory and neuromusculoskeletal functions of the client that will allow them to come up and climb the tree. Problems such as inability to move independently and dependence on others would necessitate the client in this model to use other contextual factors; specifically, the climate (social and economic systems), wherein usage of external items such as a rope or ladder will be used to match the client’s current level of physical functioning.

Adherence to a home-based therapy program targets underlying deficiencies in physical capacities and reduces, if not, prevents the functional decline among individuals.<sup>12</sup> As a result, if the person has identified any physical limitations, we can adapt the home instruction programs to meet his needs and address the concerns of climbing up the tree still and performing daily occupations. Modifications can include changing the length, duration, and intensity of activities and scheduling them within the day to prevent added stress and complications.

The **affective** component is the “feeling” aspect.<sup>8</sup> This contains the social and emotional functions of the client. Patients who display a positive affective attitude towards rehabilitation display higher intention, speeding the rehabilitation process.<sup>13</sup>

For the person to climb up the tree, they must have a drive and motivation to do it since it necessitates effort. Any identified problems in the areas should be addressed, and as practitioners, we must address the disability’s significant impact on an individual’s way of life.<sup>14</sup> The perception of disability may affect the client’s energy and drive to climb the tree and achieve the goals we have set together during the treatment planning. While therapists must focus on improving client factors, we must not overlook the person’s feelings, as they influence his motivation to seek therapy services and adhere to home instruction programs.

### 3. The Climate

The climate affects a coconut tree’s health and the ability of the person to climb up the tree. Too much sun or rain can impose difficulties to climb,

limiting the possibility of reaching the coconut fruit. As adapted from the PEOP Model, the climate represents the external environment that supports or hinders the client in this model.<sup>8</sup>

**Built environment and technology & natural environment.** The weather might affect a person’s ability to climb since too much sun or rain can cause discomfort. Studies show that insufficient space for home program facilitation, unsafe tools and devices, poor lighting, and inadequate ventilation are some of the challenges to adherence.<sup>8,15</sup> To climb safely, the weather must be warm and neutral. To climb up, there must be adequate lighting for the person to see where they are going and know what to hold onto to ensure safety while reaching for the coconut fruit. In the same way, there must be adequate lighting, ventilation, and enough space for the client to perform home-based programs to eventually reach the desired outcomes of therapy.

**Social and economic systems.** Studies show several environmental factors that influence the implementation of home rehabilitation programs for persons with disabilities.<sup>16</sup> This includes the increasing number of uninsured families, inability to pay for treatment services, equipment, reduced government funding, managed care, and other reimbursement changes also cause issues because they burden the family financially. Researchers can provide equipment to help the person climb the tree, such as ropes, ladders, good-grip footwear, and other essential items. This model emphasizes the importance of considering the client’s socioeconomic status when developing a home program and suggesting activities. The therapist and client will work together to tailor home rehabilitation programs to their financial needs while also taking advantage of what is available for practical purposes.

### 4. The Fertilizer: Spirituality

Fertilizers are substances added to soil to encourage plant growth.<sup>17</sup> Fertilizers represent the client’s spirituality. As adapted from the CMOP model, spirituality is the foundation of who a person is<sup>18</sup> and gives meaning and purpose to their lives.<sup>19</sup> Like the extrinsic factors in the PEOP model, a natural or built environment factor aids in tree propagation and

development. It will also help the client find meaning in life and set new goals as their rehabilitation progresses. Thus, the healthier the coconut tree, the more outcomes the client can achieve. By sticking to home-based programs, one can achieve more fruit comparable to their goals.<sup>19</sup> It seeks to restore well-being and recognize coping strategies<sup>20</sup> that anchor and embody a particular way of looking at life.

### OVERALL GENERAL CONCEPT OF THE MODEL

The model depicts the client's whole rehabilitation journey while zooming into a significant part: the adherence to home-based programs. Like how a coconut tree can generate 100 coconut fruits annually, each coconut fruit produced can be used for different purposes. A sturdy foundation is also required for it to yield healthy and abundant fruits. A healthy coconut tree has vascular roots that help absorb nutrients, a solid trunk that keeps the tree upright, and healthy leaves attached to the coconut fruit that can all be affected by a tree's surroundings and climate. Climate is an uncontrollable external factor that can assist or hinder a coconut tree's growth. Fertilizer is the ultimate enabler to supply nourishment and growth to the coconut tree. Applying this to Occupational Therapy, a client may have several goals throughout therapy. To achieve more goals, the client should have Spirituality, which will help them discover meaning in life and achieve more goals. These objectives can only be fulfilled if the customer receives enough contextual support (socioeconomic, physical, and personal factors). These elements will influence the rehabilitation's efficacy. The cultural and values component, on the other hand, is the anchor that keeps the client focused on the desired objective. These components are interrelated, equally important as none is superior or inferior to the others. This model allows the client to identify factors affecting his adherence to home programs. Through this, the Occupational Therapist can effectively help the client in further facilitating support and addressing barriers that can allow compliance to home-based programs and ultimately assist in attaining the client's desired therapy goals and outcomes in rehabilitation.

### UTILIZATION OF THE MODEL

This conceptual model is qualitative in nature. After the Occupational Therapist shows the picture of the model and explains the meaning of each component, an interview is to be conducted. The suggested questions provided below are flexible and may be modified accordingly to attain the full picture of each client. The open-ended questions are beneficial in allowing the client to identify and examine each component in the Occupational Tree of Life (OTL) Model. Some questions may or may not be suitable for the patient. Use the guide questions accordingly; the clinician may also add and modify the questions in accordance with the patient's status and needs.

#### Suggested guide questions per component:

##### A. Coconut Tree:

###### Roots (Culture and values)

1. Do you have any dialect or language that you understand the most and the language you are most comfortable using?
2. Are there any cultural limitations that hinder you from complying with the home care program?
3. What are the habits that can *help* or *impede* you from complying with the home care program?

###### Leaves (Social Environment)

1. Who are you living with at the moment?
2. Who do you spend most of your time with? How do you spend your time with them?
3. How does this person/s make you feel? What are the usual activities that you usually do with them?
4. Who assists you in doing homecare programs?
5. Is/are these person/s effective in motivating and encouraging you to perform the home care program? How are they motivating and encouraging you?

###### Trunk (Rehabilitation journey)

1. How do you view the rehabilitation program?
2. Do you agree that a carry-over or a follow-up program done at home is required to achieve our goals?

3. Given this homecare program, on a rate of 1-10; On what scale do you think you would be able to comply with the home care program?
4. Which part of the home program do you think is not feasible? What makes it not feasible for you?

Coconut fruit (Desirable outcomes and goals)

1. What are the activities that you would like to perform again?
2. What roles are most important to you?
3. Are there any activities and roles that you want to pursue in the future?
4. Are the goals formulated parallel to your expectation?

**B. Person (Cognitive, physical, affective)**

1. What are the limitations that impede you in performing your daily life activities?
2. How did your current situation change the way you view your life?

**C. Climate (Social and economic system; and physical environment)**

1. Describe the area where you live. Do you live in a house, condominium, or apartment? How do you move around the area?
2. Is the space adequate for performing the exercises and activities in your home instruction program?
3. Which area in your home do you spend most of your time in?
4. Do you have enough materials required in performing the homecare program?
5. Is your area feasible and adequate to perform the home instruction program?

6. Do you have any financial concerns that hinder you from completing your home program?

**D. Fertilizer (Spirituality)**

1. How do you view challenges in life?
2. What is your coping mechanism when faced with challenges?
3. How do you see yourself?
4. What are your strengths and weaknesses as a person?
5. What motivates you at the moment?
6. How motivated are you to perform *activities* in the home program? How can we sustain this kind of motivation?

The occupational therapist decided to use the OTL Model. After showing the image and explaining the meaning of each component, Julian was interviewed using the suggested questions. The interview revealed the following results:

**Limitation.** Since this model requires the client to have intact insight and communication skills to be able to express themselves and answer the questions freely during the OTL interview, it may be limited for individuals with low cognitive ability, and speech and language impairments especially those with difficulty in expressive language. While it may still be appropriate for children, other factors such as values and Spirituality may not be applicable owing to children's lack of cognitive reasoning and insight. For similar reasons, it may also be restricted among persons with mental illness due to lack of insight and motivation.

**Figure 2.** Sample Case

<b>Sample Case</b>
<p>Julian, a 30-year-old male, was diagnosed with a cerebrovascular accident. Prior to the accident, he worked as a real-estate broker. He has been receiving rehabilitation services since the onset of the disease, such as Physical Therapy to address his upper extremity weakness and Occupational Therapy for ADL retraining and use of adaptive technology. Julian has a muscle grade of 3/5 on his upper extremity, no sensory deficits, intact cognition, coherent and fluent speech, and requires moderate assistance in completing ADL tasks. Julian has good insight and is well-loved by his wife and son. His company reimbursed his hospitalization. His current goal is to perform ADL tasks, specifically dressing and personal hygiene, and grooming. He was given modified independence through the use of adaptive equipment. He was prescribed a home program however when the therapist asked about compliance, he admittedly stated that he was not able to comply to it.</p>

Table 1. Utilization of the model using the sample case

COMPONENT	JULIAN' S ANSWER
<b>COCONUT TREE</b>	<p><b>Roots:</b> Julian revealed that her wife came from a conservative family and is very conscious of any female company. He shared that all stay-in nurses he had access to were females. This hindered him from getting a nurse to assist him in doing his home programs. He values his role as a father, worker, and primary provider for his family. He also shared that prior to the onset of the disease, he was a real estate broker in a company that had a very flexible schedule that caused him to have difficulty in time management.</p> <p><b>Leaves:</b> Julian shared that he spends most of his time at home alone since his wife works and his son goes to school during the day. Although his family is hopeful for his recovery and supportive in attending therapy, he shared that mostly, there is no one who can assist him in doing the home programs. On rare occasions that his wife is home (s/a holiday), he is able to do the whole program.</p> <p><b>Trunk:</b> Julian believes that rehabilitation is essential to regain his independence. He knows that attending therapy is an important factor in reaching his goals. However, he is not that confident with the home program because he thinks it' s not possible to do it daily.</p> <p><b>Coconut fruit:</b> During the interview, Julian answered that he wants to be able to sign documents as soon as possible as this is one of tasks required of him at work. When asked about his goals for the future, he aims to be reinstated to the company in order to be able to provide for his family, let his wife rest and lessen the stress of his son to allow him to focus on his education. He also wants to be able to play basketball with his son again as this was their usual bonding activity.</p>
<b>PERSON</b>	<p><b>Physical:</b> Julian stated that since the onset of the disease, he had difficulty using his extremities. He reported weakness on both extremities and difficulty which results in difficulty in performing ADLs such as self-care activities.</p> <p><b>Cognitive:</b> Julian was given a question that requires problem-solving and was able to answer the question in a brief and coherent manner.</p> <p><b>Affective:</b> He also stated that being a person with a disability was challenging as he was the breadwinner of the family prior to the onset of the disease.</p>
<b>CLIMATE</b>	<p><b>Social and economic system:</b> The company reimbursed Julian' s hospitalization and his rehabilitation needs are financially covered also by the company</p> <p><b>Physical environment:</b> Julian lives in a two-storey house. He usually spends his time in his office which is located on the 2nd floor. He stated that although he has appropriate space to perform the home program, he only has a 10lb dumbbell and none of the therapy tools prescribed. When taking a bath, he has difficulty rinsing other parts of his body as the shower head is too heavy for him to hold.</p>
<b>FERTILIZER</b>	<p><b>Spirituality:</b> During the interview, Julian revealed that he is a born-again Christian and quoted the bible when asked about the meaning of hardships. He displays a positive view of life as he believes that there is a higher being that “ works things out for good” . He shyly admitted that his self-confidence has lowered since the disease but he prays in order to cope. He shared that his family motivates him the most and is his inspiration to reach recovery.</p>

Furthermore, while this model tackles motivation, which is part of the person's affective component, it may be improved by looking at its impact on occupational performance. Another disadvantage is the lack of research on adherence in Occupational Therapy home rehabilitation programs in the Philippines. Other characteristics such as format and structure of a successful home OT program are not addressed in this model.

### **CONCLUSIONS AND RECOMMENDATIONS**

The OTL model aims to address the clinical roadblock experienced by most Occupational Therapists which is the client's adherence to home-based rehabilitation programs. By allowing the client to actively engage in identifying the model's components and answering the guide questions, this model would provide a clear representation of the elements that help or hinder compliance.

Using the OTL model, Occupational Therapists can use this as a subjective assessment tool for occupational therapy prognosis and know the internal and external supports, and barriers that the client faces which support or impede the Occupational Therapy intervention. The client and therapist would become active participants to ensure that the desired outcomes of therapy are achieved resulting in continuous collaborative efforts from assessment to intervention. This would also allow practitioners to see the Occupational Therapy process clearly and help other healthcare professionals identify and address factors limiting the client's adherence to home programs. This model would also help identify the need for referral to other health professionals as problems get highlighted.

This model also aims to establish the client's recovery potential and prognosis by describing the direct relationship between the client, environmental and contextual factors and how it affects compliance to home rehabilitation programs. Practitioners can manage clinical roadblocks such as restricted space and lack of social support by coming up with solutions, making realistic suggestions and using their

clinical reasoning to address these identified issues.

Because the OTL model is qualitative in nature, sample guide questions can aid in identifying the model's components. "How," "What," "Where" and "Why?" are the most important questions to ask and analyze. However, the sample questions may not be applicable for all practitioners and clients. It is suggested that therapists generate their own questions to aid the client in expressing themselves and identifying the components.

Further research on adherence to home programs in the Philippines in relevance to issues in culture and values is recommended. Further research is also needed on the impact of motivation, environmental contexts, and characteristics of successful OT home programs in addressing adherence to OT home programs while utilizing the OTL model among clients.

### **Individual Author's Contribution**

E.C.: conception of work, acquisition, analysis and interpretation of work, drafting and critically revising the work, approval of the version to be submitted for publication, and accountable for most aspects of the work; K.C.: conception of work, acquisition, analysis and interpretation of work, drafting and critically revising the work, approval of the version to be submitted for publication, and accountable for most aspects of the work; C.G.L.: conception of work, acquisition, analysis and interpretation of work, drafting and critically revising the work, approval of the version to be submitted for publication, and accountable for most aspects of the work; Q.N.M.: conception of work, acquisition, analysis and interpretation of work, drafting and critically revising the work, approval of the version to be submitted for publication, and accountable for most aspects of the work; C.P.: conception of work, acquisition, analysis and interpretation of work, drafting and critically revising the work, approval of the version to be submitted for publication, and accountable for most aspects of the work; R.C.D: drafting and critically revising the work, approval of the version to be submitted for publication.

## Disclosure statement

Elaine Caday, OTRP, and Coleen Perez, OTRP, are regular members of PAOT. The views expressed in this paper do not reflect the general position or opinion of the organization. The first five authors are graduate students of Master of Science in Occupational Therapy in the University of Santo Tomas.

## Conflicts of interest

The authors of this paper declare no conflicting interest.

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## References

1. Brumbach C, Louthain K. An Activities-Based Home Program Manual for Student Occupational Therapists in a Campus-Based Teaching Clinic. *Sound Ideas*. 2015 May; 2. Available from: [http://soundideas.pugetsound.edu/ms\\_occ\\_therapy/14](http://soundideas.pugetsound.edu/ms_occ_therapy/14)
2. American Occupational Therapy Association. Occupational therapy practice framework: Domain and process (4th ed.). *American Journal of Occupational Therapy*. 2020;74 (Suppl. 2). DOI: <https://doi.org/10.5014/ajot.2020.74S2001>
3. Argent R, Daly A, Caulfield B. Patient Involvement With Home-Based Exercise Programs: Can Connected Health Interventions Influence Adherence?. *JMIR Mhealth Uhealth*. 2018; 6(3). DOI: <https://doi.org/10.2196/mhealth.8518>
4. Ramos R. The Coconut Tree, The Philippines Tree of Life. *The Daily Roar*; 2013 [updated 2013 June 21]. Available from: <https://thedailyroar.com/culture/the-coconut-tree-the-philippines-tree-of-life/>
5. Combs SA, Kelly SP, Barton R, Ivaska M, Nowak K. Effects of an intensive, task-specific rehabilitation program for individuals with chronic stroke: a case series. *Disabil Rehabil*. 2010;32(8):669-78. DOI: 10.3109/09638280903242716. PMID: 20205581.
6. Reed KL, Sanderson SR. *Concepts of Occupational Therapy*. 4th ed. Baltimore: Lippincott Williams and Wilkins; 1999.
7. Duncan E, *Foundations for Practice in Occupational Therapy* (5th ed.). Churchill Livingstone Elsevier; 2011.
8. Iwama, MK, Thomson NA, & Macdonald RM. The Kawa Model: The Power of Culturally Responsive Occupational Therapy. *Disability and Rehabilitation*. (2009) 31(14), 1125–1135. <https://doi.org/10.1080/09638280902773711>
9. Mind Matters. What are Cognitive Skills?. Khald Amman Jordan: Mind Matters; 2018 [updated 2019 March 31]. Available from: <https://www.mindmattersjo.com/what-are-cognitive-skills.html>.
10. Donoso Brown EV, Nolfi D, Wallace SE, Eskander J, Hoffman JM. Home Program Practices for Supporting and Measuring Adherence in Post-stroke Rehabilitation: A Scoping Review. 2019; 1–24. doi:10.1080/10749357.2019.1707950
11. Gill TM, Baker DI, Gottschalk M, Peduzzi PN, Allore H, Van Ness PH. A Prehabilitation Program for the Prevention of Functional Decline: Effect on Higher-level Physical Function. *Archives of Physical Medicine and Rehabilitation*. 2004; 85(7), 1043–1049. doi:10.1016/j.apmr.2003.10.021
12. Bermudez T, Bolger N, Bierbauer W, Bernardo A, Fleisch-Silverstri R, Hermann M, et al. Physical activity after cardiac rehabilitation: Explicit and implicit attitudinal components and ambivalence. *Health Psychology*. 2021; 40(8): 491-501. <https://doi.org/10.1037/hea0001109>
13. Clark IN, Tamplin JD, Baker FA. Community-Dwelling People Living With Dementia and Their Family Caregivers Experience Enhanced Relationships and Feelings of Well-Being Following Therapeutic Group Singing: A Qualitative Thematic Analysis. *Front Psychol*. 2018 Jul 30;9:1332. doi: 10.3389/fpsyg.2018.01332. PMID: 30104994; PMCID: PMC6077620.
14. Okezue OC, Nwafor GC, Ezeukwu OA, John JN, Uchenwoke CI. Adherence to Home Exercise Programmes and its Associated Factors among Patients Receiving Physiotherapy. *ClinHealthPromot [Internet]*. 2019 May 31;9(1):7-14. Available from: <https://www.clinhealthpromot.org/index.php/clinhp/article/view/clinhp19003>
15. Rone-Adams SA, Stern DF, Walker V. Stress and compliance with a home exercise program among caregivers of children with disabilities. *Pediatr Phys Ther*. 2004 Fall;16(3):140-8. doi: 10.1097/01.PEP.0000136006.13449.DC. PMID: 17057541.
16. Sedlacek C, Giguere A and Pjevac P (2020) Is Too Much Fertilizer a Problem?. *Front. Young Minds*. 8:63. doi: 10.3389/frym.2020.00063
17. Vadnais E. Spirituality And Healing | Holistic Occupational Therapy Community. Minnesota USA: 2019 [update 2019 May 10]. Available from: <https://holisticot.org/spirituality-healing/>
18. Muldoon MH, Norman King J. A spirituality for the long haul: Response to chronic illness. *Journal of Religion & Health*. 1991;30(2):99-108. DOI: 10.1007/bf00988699
19. Jones J, Topping A, Wattis J, Smith, J. A concept analysis of spirituality in Occupational therapy practice. *Journal for the Study of Spirituality*. 2016;6(1);38-57. DOI:

10.1080/20440243.2016.1158455

20. Alrifai O, Marcone MF. Coconut – The tree of life – Improvement by biotechnology. *Comprehensive Biotechnology*. 2019;4;586-594. DOI: 10.1016/B978-0-444-64046-8.00464-X

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