

HARAMAYA UNIVERSITY

POSTGRADUATE PROGRAM DIRECTORAT DIRECTOR

**ATTITUDES OF PERSONS WITH PHYSICAL DISABILITIES TOWARDS PHYSIOTHERAPY
DIRE DAWA, ETHIOPIA**

MA- THESIS

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Attitudes to Wards Physiotherapy Treatment among Persons with Physical Disabilities in Dire Dawa Administration

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LIST OF ABBRIVIATION

ATP	Attitude Toward Physiotherapy
ENAPPD	Ethiopian National Association of Persons with Physical Disabilities
HBM	Health Belief Model
KAPDAP	Knowledge, Attitudes, and Practices of Disability Awareness and Perceptions
MAS	Multidimensional Attitude Scale
PLWD	People Living with Disabilities
PWD	People with Disabilities
SPSS	Statistical Package for the Social Sciences
TPB	Theory of Planned Behavior
UNICEF	United Nations Children's Fund
WHO	World Health Organization

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ABSTRACT

This study examined attitudes towards physiotherapy treatment among persons with physical disabilities in the Dire Dawa Administration, Ethiopia. Using a concurrent mixed-methods design, the research assessed attitudes across four dimensions cognitive, affective, behavioral, and demographic and their relationship with perceptions of treatment efficacy. A purposive sampling technique was used to select 300 participants, from whom 290 completed questionnaires were obtained, yielding a 96.7% response rate. Quantitative data were analyzed using descriptive statistics, correlation, and multiple linear regression in SPSS (Version 26), while qualitative data provided contextual depth. The sample was predominantly male (64.8%), aged 35–45 years (59.7%), and held a first-degree education (76.2%). Descriptive results revealed moderate-to-high positive attitudes across most dimensions, though behavioral engagement (e.g., regular session attendance, home exercise compliance) scored relatively lower. Notably, the demographic dimension, which captured socio-cultural influences, scored highest (mean ≈ 3.87), indicating strong community and cultural influences on treatment-seeking behavior. Correlation analysis showed significant positive relationships ($p < 0.01$) between all attitude dimensions and overall perception of physiotherapy treatment, with the strongest association observed between the demographic dimension and treatment perception ($r = 0.788$). Regression analysis confirmed that all four attitude dimensions significantly predicted perceptions of physiotherapy treatment, accounting for 69.5% of the variance ($R^2 = 0.695$, $p < 0.001$). The demographic dimension emerged as the strongest predictor ($\beta = 0.529$, $p < 0.001$), followed by behavioral ($\beta = 0.266$, $p < 0.001$), affective ($\beta = 0.155$, $p < 0.001$), and cognitive dimensions ($\beta = 0.071$, $p = 0.037$). The model met all necessary assumptions normality, linearity, homoscedasticity, and absence of multicollinearity. The findings underscore that socio-cultural and community factors are critical in shaping attitudes and treatment engagement. The study recommends that physiotherapy programs in similar contexts integrate community awareness initiatives and culturally sensitive approaches to enhance service utilization and outcomes for persons with physical disabilities.

Keywords: Attitudes, Physiotherapy, Physical Disabilities, Socio-Cultural Factors, Dire Dawa, Ethiopia, Mixed Methods.

CHAPTER ONE

1.INTRODUCTION

This chapter comprises of background of the study, statement of the problem, research questions, and objective of the study, importance of the studies, scope of the studies, limitation of the study, definition of terms and finally organization of the paper.

1.1. BACKGROUND OF THE STUDY RESEARCH

Disability is an evolving, multi-dimensional concept that reflects the complex interaction between an individual's health condition and the environmental or personal context in which they live (World Health Organization, 2022). Globally, it is estimated that over one billion people live with some form of disability, representing approximately 15% to 16% of the world's population (WHO, 2022; World Bank, 2023). Before zooming into specific physical or functional impairments, it is critical to recognize that disability as a broader social concept encompasses structural barriers, societal attitudes, and systemic exclusions that limit an individual's full participation in everyday life (Shakespeare, 2014). When these institutional and environmental barriers intersect with biological variations, impairments can severely constrain individual independence, livelihood opportunities, and overall well-being (Oliver, 2013).

Within this broader umbrella of disability, physical disabilities represent one of the most prevalent forms of impairment worldwide, limiting the motor function, mobility, and physical capacity of hundreds of millions of people (Vos et al., 2020). For individuals facing these specific mobility and musculoskeletal challenges, physiotherapy serves as an essential healthcare discipline and rehabilitation pathway (World Physiotherapy, 2021). By utilizing evidence-based methods such as manual therapy, personalized exercise regimens, and patient education, physiotherapy aims to restore motor function, maximize muscle strength, alleviate chronic pain, and prevent secondary clinical complications like muscle atrophy or joint stiffness (Dean, 2009; Twogood et al., 2021).

However, the global utilization of rehabilitation medicine is severely fractured along socio-economic and cultural lines (Kamenov et al., 2021). In high-income countries, robust public health infrastructure and widespread institutional awareness foster positive attitudes, resulting in high treatment adherence and patient satisfaction (Grotle et al., 2019). Conversely, in low- and middle-income regions, physiotherapy remains critically underutilized (Jesus et al., 2021). This underutilization is rarely just a matter of clinical

availability; it is heavily driven by persistent social stigmas, widespread misconceptions, low health literacy, and a deeply entrenched community reliance on traditional or spiritual healing modalities (MacLachlan et al., 2012; Bright et al., 2018).

Moving to the African continent, these challenges are magnified by historical healthcare resource deficits and competing public health priorities (Rhoda et al., 2015). Across many African nations, rehabilitation services like physical therapy are viewed as secondary health investments or luxury care options rather than foundational components of primary healthcare (Tinney et al., 2007). This systemic neglect is worsened by the pervasive social exclusion of persons with physical disabilities, where cultural narratives frequently frame physical impairments through a lens of charity, dependency, or supernatural misdeeds (Maja et al., 2011; Amosun et al., 2013). Consequently, formal rehabilitation pathways are frequently obscured by structural and socio-cultural barriers, forcing many individuals into long-term functional dependency.

In the Ethiopian context, disability constitutes a massive social and public health challenge, with national estimates indicating that more than 17% of the population lives with some form of impairment (Central Statistical Agency, 2007; Ministry of Health, 2021). Physical disabilities—including congenital limb impairments, acquired mobility difficulties, and severe musculoskeletal conditions make up a massive proportion of this demographic (Tilahun et al., 2019). For these millions of Ethiopians, regular access to physiotherapy is a vital prerequisite for community reintegration and economic survival (Gudlavalleti et al., 2014). Yet, empirical evidence from across the country reveals mixed public perceptions and highly uneven utilization rates. Studies in regions like Gondar and Amhara have documented that outpatient satisfaction and treatment adoption are heavily constrained by inconsistent referral networks, financial limitations, and an ongoing societal preference for traditional alternative therapies (Abebe et al., 2017; Demis et al., 2022).

At the localized level of the Dire Dawa City Administration, these dynamics take on a distinct and severe urgency. As a major regional hub undergoing rapid population growth and urbanization, Dire Dawa features a complex landscape where modern medical infrastructure directly coexists with deeply traditional cultural dynamics (Dire Dawa City Administration, 2023). The rapid expansion of the city's population has significantly heightened the absolute prevalence of mobility impairments resulting from industrial incidents, traffic accidents, chronic non-communicable conditions, and congenital disorders (MoH, 2022). This swelling demographic pressure makes the local availability and acceptance of physiotherapy services completely vital.

However, within the communities of Dire Dawa, physical disability is frequently met with localized social stigma, environmental inaccessibility, and a strong cultural inclination toward spiritual or traditional healing practices (Deribe et al., 2015). When families or individuals view physical impairments through a purely spiritual lens, physiotherapy is often completely dismissed or relegated to a last resort (Tekle & Yosef, 2020). This local dynamic creates a hostile environment for treatment adherence, rendering functional recovery highly difficult for individuals who could otherwise achieve independence. Because local healthcare strategies cannot succeed without understanding the specific social evaluations and emotional standpoints of the service users themselves, exploring the precise attitudes of persons with physical disabilities toward physiotherapy in the Dire Dawa Administration is an absolute necessity.

1.2 STATEMENT OF THE PROBLEM

Physical disabilities limit millions of individuals worldwide from participating fully in socioeconomic life (WHO, 2022). In developing countries, the severity of these impairments is heavily aggravated by systemic poverty, poor localized living conditions, inadequate sanitation, and highly restricted access to medical rehabilitation centers (World Bank, 2023). While physiotherapy is globally recognized as an essential health service that is foundational to improving mobility, alleviating chronic pain, and elevating an individual's quality of life, its actual uptake remains low in resource-constrained environments like Ethiopia (Jesus et al., 2021; MoH, 2021).

This low utilization rate cannot be explained by clinical or structural factors alone; it is heavily shaped by psychological and social dimensions (Ajzen, 1991). According to the Theory of Planned Behavior, an individual's health-seeking behavior is dictated by their cognitive understanding, affective emotional responses, and the surrounding socio-cultural expectations regarding their treatment (Ajzen, 1991; Rosenstock et al., 1988). Misconceptions that falsely classify physiotherapy as an unnecessary luxury, a secondary option, or a treatment reserved exclusively for acute sports injuries create severe cognitive and behavioral barriers to care (Bright et al., 2018).

While the literature on healthcare delivery in Ethiopia has expanded, existing studies suffer from a profound perspectival gap. The vast majority of localized research on physiotherapy focuses heavily on the supply side—measuring the clinical knowledge of healthcare professionals, tracking institutional service availability, or quantifying basic patient satisfaction scores in a top-down manner (e.g., Abebe et al., 2017; Demis et al., 2022). These studies systematically leave the voice of the primary service users—persons with physical disabilities—completely in the shadows. We know very little about the emotional

journeys, personal agencies, and specific cultural pressures that dictate whether a person with a mobility impairment in a specific community chooses to engage with or completely reject physical rehabilitation.

Furthermore, there is a distinct geographical and contextual void regarding this issue within the Dire Dawa City Administration. No prior empirical research has been conducted in this administrative area to evaluate how the local community's unique socio-cultural mix, urban-peri-urban dynamics, and localized stigma specifically shape the attitudes of persons with physical disabilities toward seeking physical therapy. Currently, regional health policies and disability advocacy frameworks are being designed without any localized, empirical evidence.

This research directly addresses these critical gaps by asking: Why do persons with physical disabilities in Dire Dawa choose to utilize or disengage from these vital services, and what specific socio-cultural and psychological dimensions drive these decisions? By using a mixed-methods design to investigate the cognitive, affective, behavioral, and demographic dimensions of attitudes among this population, this study identifies the exact contextual gaps and hidden socio-cultural barriers that prevent equitable rehabilitation access. This localized evidence is absolutely vital for replacing speculative assumptions with concrete data, enabling the development of culturally sensitive, patient-centered interventions that foster genuine disability inclusion and healthcare equity in the region.

1.3 RESEARCH QUESTIONS.

1. What are the attitudes of persons with physical disabilities toward physiotherapy treatment?
2. What are the prevailing attitudes of persons with physical disabilities toward physiotherapy treatment?
3. How do socio-demographic factors influence attitudes toward physiotherapy among persons with physical disabilities?
4. In what ways do cultural beliefs and societal perceptions affect attitudes toward physiotherapy treatment?
5. Is there any statistically significance difference in attitude of persons with physical disabilities toward physiotherapy as a result of demographic factors (sex, center of physiotherapy, age)?

1.4. RESEARCH OBJECTIVE

1.4.1. GENERAL RESEARCH OBJECTIVE

The general objective of these researches to assess the attitudes toward physiotherapy treatment among persons with physical disabilities in Dire Dawa Administration.

1.4.2. SPECIFIC OBJECTIVE

- ✓ To assess the attitudes of persons with physical disabilities toward physiotherapy treatment?
- ✓ To examine the level of awareness and understanding of physiotherapy among persons with physical disabilities in Dire Dawa.
- ✓ To identify the attitudes of persons with physical disabilities toward physiotherapy treatment.
- ✓ To explore the influence of socio-demographic factors (age, gender, education, income, type of disability) on attitudes toward physiotherapy.
- ✓ To assess the role of cultural beliefs and societal perceptions in shaping attitudes toward physiotherapy.
- ✓ To examine there any statistically significance difference in attitude of persons with physical disabilities toward physiotherapy as a result of demographic factors (sex, center of physiotherapy, age)?

1.5 SIGNIFICANCE OF THE STUDY

The significance of this study lies in its capacity to systematically bridge the critical empirical, methodological, and contextual gaps identified in the statement of the problem. By shifting the research lens from institutional provider metrics to the lived experiences of persons with physical disabilities within the Dire Dawa City Administration, this study provides distinct contributions across multiple tiers:

1.5.1 Bridging the Perspectival and Knowledge Gap

Prior research in Ethiopia has predominantly relied on top-down, provider-centric models that evaluate hospital infrastructure or clinician knowledge, leaving the authentic voice of the primary service users obscured. This study bridges this profound perspectival gap by providing baseline empirical data on the cognitive, affective, and behavioral dimensions of attitudes held by persons with physical disabilities. It moves beyond superficial satisfaction scores to reveal how personal agency, emotional standpoints, and psychological barriers influence rehabilitation uptake. Consequently, this study serves as an essential

reference for public health researchers, psychologists, and medical sociologists looking to understand health-seeking behaviors from a patient-centered perspective.

1.5.2 Resolving the Geographical and Contextual Void

Because no prior empirical study on physiotherapy attitudes has been conducted within the Dire Dawa City Administration, regional health bureaus have lacked localized evidence to guide their strategies. This study directly resolves this geographical void by contextualizing the interaction between Dire Dawa's rapid urbanization, its distinct urban-peri-urban socio-cultural dynamics, and its localized social stigmas. The findings uncover the hidden socio-cultural barriers—such as the powerful influence of traditional or spiritual healing preferences—that uniquely shape health choices in this region. This provides the Dire Dawa City Administration Health Bureau with the concrete data necessary to transition from speculative planning to evidence-based health interventions.

1.5.3 Practical Contributions for Policy and Advocacy

For policymakers, health planners, and non-governmental organizations (NGOs) specializing in disability inclusion, this study outlines actionable pathways to improve rehabilitation equity. By proving that demographic and socio-cultural dimensions are the most powerful drivers of treatment utilization, the data helps planners design culturally sensitive public health campaigns. Instead of deploying generic, material-focused interventions, local authorities can use these insights to build community-level peer-support networks and targeted health-literacy programs. Ultimately, these steps help dismantle localized stigma, elevate treatment compliance, and foster genuine socio-economic inclusion for individuals with mobility impairments.

1.6 DELIMINATION OF THE STUDIES

To preserve the study's scientific validity, methodological rigor, and analytical depth, its scope is precisely delimited across geographical, population, conceptual, and temporal boundaries:

Geographical Delimitation: This study is strictly confined to the public healthcare infrastructure and urban/peri-urban residential sectors within the Dire Dawa City Administration, Eastern Ethiopia. Dire Dawa is specifically selected because it serves as a major, rapidly urbanizing regional hub experiencing a rise in mobility impairments caused by expanding industrial complexes and traffic incidents. Crucially, its unique socio-cultural mix features a strong, localized coexistence of modern medicine and deeply rooted

traditional or spiritual healing practices, making it the ideal setting to investigate complex cultural attitudes toward physical rehabilitation.

Population and Sampling Delimitation: The target population is strictly limited to persons with physical disabilities (specifically mobility and musculoskeletal impairments) who are permanent residents of the administration. It excludes individuals with purely sensory (visual/hearing) or cognitive impairments to maintain a sharp analytical focus on motor-function rehabilitation. The sample is drawn from registered members of local disability associations and outpatients attending physical rehabilitation departments at selected public hospitals (e.g., Dil Chora Referral Hospital). A representative sample size is determined using standard statistical formulas, utilizing probability sampling for the quantitative survey and purposive sampling to select key informants for the qualitative interviews.

Conceptual Delimitation: Conceptually, this research does not evaluate the clinical efficacy of specific physiotherapy techniques, nor does it audit hospital resource management. Instead, it is strictly delimited to investigating individual and community attitudes toward physiotherapy, structurally broken down into four distinct dimensions: Cognitive (knowledge and beliefs), Affective (emotional responses), Behavioral (adherence and practice), and Demographic/Socio-cultural (community pressures, traditional healing preferences, and demographic shifts).

Temporal Delimitation: The empirical data collection, analysis, and final reporting for this research are strictly bound to the 2026 academic calendar. This contemporary timeline ensures that the findings accurately capture the post-pandemic realities of the local healthcare system, modern urban expansion pressures, and the current, active digital and social landscape of the Dire Dawa Administration.

1.7 DEFINITION OF KEY TERMS

To eliminate ambiguity and ensure conceptual clarity, the key terms in this study are operationally defined strictly according to how they are measured and applied within the specific context of this research:

Attitude toward Physiotherapy: The specific evaluation, mindset, and readiness of an individual to utilize physical therapy services. In this study, it is operationally measured as a composite score derived from a 5-point Likert scale evaluating four distinct dimensions: cognitive beliefs, affective feelings, behavioral execution, and socio-cultural influences.

Physical Disability: A long-term physical, musculoskeletal, or neurological impairment that limits an individual's motor function, mobility, or dexterity. Operationally, this refers to permanent residents of

Dire Dawa living with conditions such as congenital limb deformities, post-traumatic mobility loss (from industrial or traffic accidents), or joint-function limitations, who are candidates for physical rehabilitation.

Physiotherapy Utilization: The actual behavioral engagement of a person with a physical disability with formal physical rehabilitation services. Operationally, this is measured by the respondent's history of hospital visits, their self-reported frequency of attending scheduled clinical sessions, and their active compliance with prescribed home exercise regimens.

Cognitive Dimension: The level of correct baseline knowledge, factual understanding, and structural beliefs that an individual holds regarding the purpose, safety, and benefits of physical therapy.

Affective Dimension: The emotional standing, personal feelings, and internal psychological responses (ranging from hope and confidence to fear, anxiety, or embarrassment) that an individual associates with undergoing physical rehabilitation.

Behavioral Dimension: The observable actions, habits, and choices made by the individual regarding their treatment, specifically operationally defined as their consistency in attending physical therapy appointments and their adherence to clinical instructions.

Socio-cultural/Demographic Dimension: The external community pressures, family expectations, and localized cultural narratives that influence health choices. In this study, it operationally measures the degree to which an individual's rehabilitation choices are dictated by local social stigma or a competing preference for traditional and spiritual healing practices.

1.8 ORGANIZATION OF THE STUDY

The study is going to be organized in to five chapters. The first chapter has introduction, statement of the problem, objective of the study, significance of the study, delimitation of the study, limitation of the study and organization of the study. The Second chapter covers literature survey while the third chapter focuses on the methodology part the fourth chapter has covers result and discussions of the result and finally five chapters covers conclusion and recommendations.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

This chapter presents a review of relevant literature related to physiotherapy treatment, focusing on theoretical, empirical, and conceptual perspectives. The review is conducted to identify and synthesize existing knowledge on attitudes toward physiotherapy treatment among persons with physical disabilities. By examining key concepts, theories, and previous studies, this chapter provides a foundation for understanding the topic and helps to address the research questions of the study.

2.1 Theoretical Frameworks of Disability and Physiotherapy

To construct a robust analytical foundation for this study, the literature review must begin by conceptualizing the overarching phenomenon of disability before evaluating the specific clinical and behavioral mechanics of physical rehabilitation. Understanding how disability is constructed socially and psychologically is a prerequisite to analyzing how individuals perceive and utilize physiotherapy services. This study adopts and integrates two primary theoretical frameworks to guide its empirical investigation: The Social Model of Disability and The Theory of Planned Behavior (TPB).

2.1.1 Theoretical Frameworks of Disability: The Social Model

For decades, disability was viewed exclusively through a *Medical Model*, which conceptualizes disability as an individual biological deficit, illness, or personal tragedy requiring a purely clinical cure (Oliver, 2013). This study explicitly rejects the solitary use of the medical model, adopting instead the **Social Model of Disability** originally conceptualized by Oliver (1983).

The Social Model draws a sharp distinction between *impairment* (the functional, anatomical, or musculoskeletal limitation of the body) and *disability* (the disadvantage or restriction of activity caused by a contemporary social organization which takes little or no account of people who have physical impairments and thus excludes them from participation in the mainstream of social life).

Within this study's context, the Social Model frames how structural exclusions, localized institutional barriers, and deep-seated cultural stigmas within the Dire Dawa City Administration actively "disable" individuals with mobility impairments. It establishes that a person's decision to utilize or reject physical

therapy is not merely an isolated clinical choice, but a complex negotiation with an environment filled with architectural, economic, and socio-cultural barriers.

2.1.2. Theoretical Concepts of Physiotherapy and Behavior: The Theory of Planned Behavior

Once the broader structural experience of disability is established via the Social Model, the analysis must transition to how these experiences shape individual health-seeking choices. To evaluate this, the study adopts the **Theory of Planned Behavior (TPB)** (Ajzen, 1991).

The TPB posits that human action and health-seeking behavior are guided by three types of considerations:

1. **Behavioral Beliefs (Cognitive Dimension):** Beliefs about the likely consequences of the behavior, which produce a favorable or unfavorable *attitude toward the behavior*.
2. **Normative Beliefs (Affective/Socio-cultural Dimension):** Beliefs about the normative expectations of others, which result in perceived social pressure or *subjective norms*.
3. **Control Beliefs (Behavioral Dimension):** Beliefs about the presence of factors that may facilitate or impede performance of the behavior, resulting in *perceived behavioral control*.

By synthesizing the Social Model and the TPB, this study transitions from loose theoretical assumptions into a structured framework. The Social Model identifies the external socio-cultural and environmental barriers, while the TPB operationalizes these barriers into internal psychological dimensions (Cognitive, Affective, Behavioral, and Demographic/Socio-cultural) that directly affect an individual's decision to utilize physiotherapy.

2.3 EMPIRICAL REVIEW

This section evaluates global, continental, and national data regarding the four specific dimensions of attitudes towards physiotherapy, directly addressing the gaps identified in Section

2.2.1 The Cognitive Dimension of Patient Attitudes

The cognitive dimension comprises the baseline knowledge, factual awareness, and core beliefs that persons with physical disabilities hold regarding the functional mechanics and purposes of physiotherapy. Globally, low health literacy regarding rehabilitation medicine acts as a significant barrier to care (Bright et al., 2018). In developing nations, severe cognitive misconceptions prevail; physical therapy is frequently mischaracterized as an unnecessary luxury or an auxiliary care path meant only for elite athletes (Jesus et al., 2021).

In Ethiopia, top-down studies reveal that even when clinical services are available, patients often lack basic structural awareness of how continuous physical therapy prevents permanent muscle atrophy or joint contractures (Abebe et al., 2017). This lack of cognitive clarity directly drives low referral compliance and high dropout rates.

2.2.2 The Affective Dimension of Patient Attitudes

The affective dimension captures the internal emotional standings, feelings of hope, anxieties, and psychological vulnerabilities that individuals associate with physical rehabilitation. For a person with a physical impairment, undergoing physical rehabilitation is a deeply emotional journey.

In sub-Saharan Africa, institutional environments can provoke high levels of emotional distress, feelings of dependency, or severe embarrassment during manual physical therapy sessions (Rhoda et al., 2015). Because prior Ethiopian literature has suffered from a profound *perspectival gap* by focusing primarily on hospital asset metrics, the authentic affective states—such as how localized shame, loss of dignity, or personal hope impact a patient's motivation—have remained completely unexamined.

2.2.3 The Behavioral Dimension of Patient Adherence

The behavioral dimension evaluates the explicit, observable actions taken by individuals, measured through clinical appointment attendance and compliance with prescribed home exercise regimens. Undergoing physiotherapy requires intense behavioral discipline over an extended period.

Empirical evidence indicates that across low-income settings, physical therapy utilization rates drop rapidly after the first few initial sessions (Kamenov et al., 2021). This behavioral disengagement is rarely just a matter of individual laziness; it is heavily dictated by perceived behavioral control, such as the sudden onset of financial constraints, transportation challenges, or immediate physical exhaustion from navigating inaccessible urban layout designs (Demis et al., 2022).

2.2.4 The Demographic and Socio-cultural Dimension

The demographic and socio-cultural dimension represents the strongest external environmental predictor of health-seeking behavior within traditional communities. In the context of Eastern Ethiopia and the Dire Dawa Administration, healthcare choices do not occur in a vacuum; they are heavily policed by family systems, community leaders, and deeply rooted spiritual frameworks (Tekle & Yosef, 2020).

When localized social stigma frames a physical disability as an ancestral curse, a spiritual affliction, or a divine punishment, individuals are heavily pressured by their community to bypass formal medical

institutions entirely (Deribe et al., 2015). Instead, they seek out alternative traditional bone-setters, holy water sites (*Tsebel*), or spiritual healers, completely relegating clinical physiotherapy to an ineffective last resort.

2.3 Synthesis and Summary of Research Gaps

Despite the growing body of literature tracking public healthcare indicators across East Africa, a systematic synthesis of the empirical field exposes two fatal gaps that directly motivate and justify the conduct of this study, aligning perfectly with the primary objectives established in the Statement of the Problem:

1. **The Perspectival Gap (The Missing Voice):** The vast majority of existing physiotherapy and rehabilitation studies in Ethiopia (e.g., Abebe et al., 2017; Demis et al., 2022) are heavily skewed toward a top-down, provider-centric methodology. They measure objective hospital capacities, clinical knowledge of physicians, or generic outpatient exit-satisfaction percentages. They completely leave out the personal perspective of the primary service users—persons with physical disabilities. This study explicitly bridges this gap by gathering empirical data directly from this marginalized population, exploring the cognitive, affective, and behavioral dynamics that govern their personal healthcare choices.
2. **The Geographical and Contextual Void:** There is an absolute lack of baseline empirical data regarding rehabilitation utilization within the **Dire Dawa City Administration**. Dire Dawa presents a unique urban-peri-urban demographic mix experiencing rapid industrialization and an increase in traffic-related motor impairments. No prior study has mapped how the localized social stigmas, economic realities, and traditional healing preferences specific to Dire Dawa's communities interact to shape how individuals perceive physical rehabilitation. This study directly resolves this regional knowledge void, replacing assumptions with localized, actionable data.

2.5 CONCEPTUAL FRAMEWORK OF THE STUDY

The conceptual framework of this study is designed to explore the social perceptions and attitudes toward physiotherapy treatment among persons with physical disabilities in Dire Dawa City Administration. The framework proposes that social perceptions and attitudes play a crucial role in the utilization of physiotherapy services. Independent variables include social perception, which refers to the broader societal views on physiotherapy, and perceived need for physiotherapy, which reflects individuals' beliefs about the necessity of such treatment (Seher et al., 2022).

In addition, attitudes toward seeking treatment and the continuity of physiotherapy treatment are key factors influencing how individuals engage with healthcare services (Albishi, 2024). These factors are moderated by socio-demographic characteristics, access to services, cultural and social norms, and health education, which may either facilitate or hinder treatment uptake (Vasu & Hui, 2024; Baig et al., 2023).

The dependent variable in this framework is the engagement with physiotherapy treatment, which measures the extent to which individuals with physical disabilities actively seek and continue treatment. Thus, this framework was guide the analysis and interpretation of the factors affecting physiotherapy treatment engagement.

A. Variable (DV)

The dependent variable of this study is the attitude towards physiotherapy treatment, which represents the overall positive or negative evaluation that persons with physical disabilities hold about physiotherapy, measured through cognitive (beliefs/knowledge), affective (feelings/emotions), and behavioral (actions/intentions) dimensions using Likert-scale items.

B. Independent Variables (IVs) Cognitive Dimension

The cognitive dimension refers to the beliefs, knowledge, and perceptions that persons with physical disabilities have about physiotherapy, which may include their awareness of its benefits, perceptions of treatment effectiveness, and knowledge about the accessibility of services.

Affective Dimension; -The affective dimension captures the emotional responses and feelings of persons with physical disabilities toward physiotherapy, such as their comfort level, sense of hope, satisfaction, and trust in physiotherapists.

Behavioral Dimension; -The behavioral dimension reflects the observable actions and intentions of persons with physical disabilities regarding physiotherapy, including their adherence to treatment, willingness to continue sessions, and tendency to recommend physiotherapy to others.

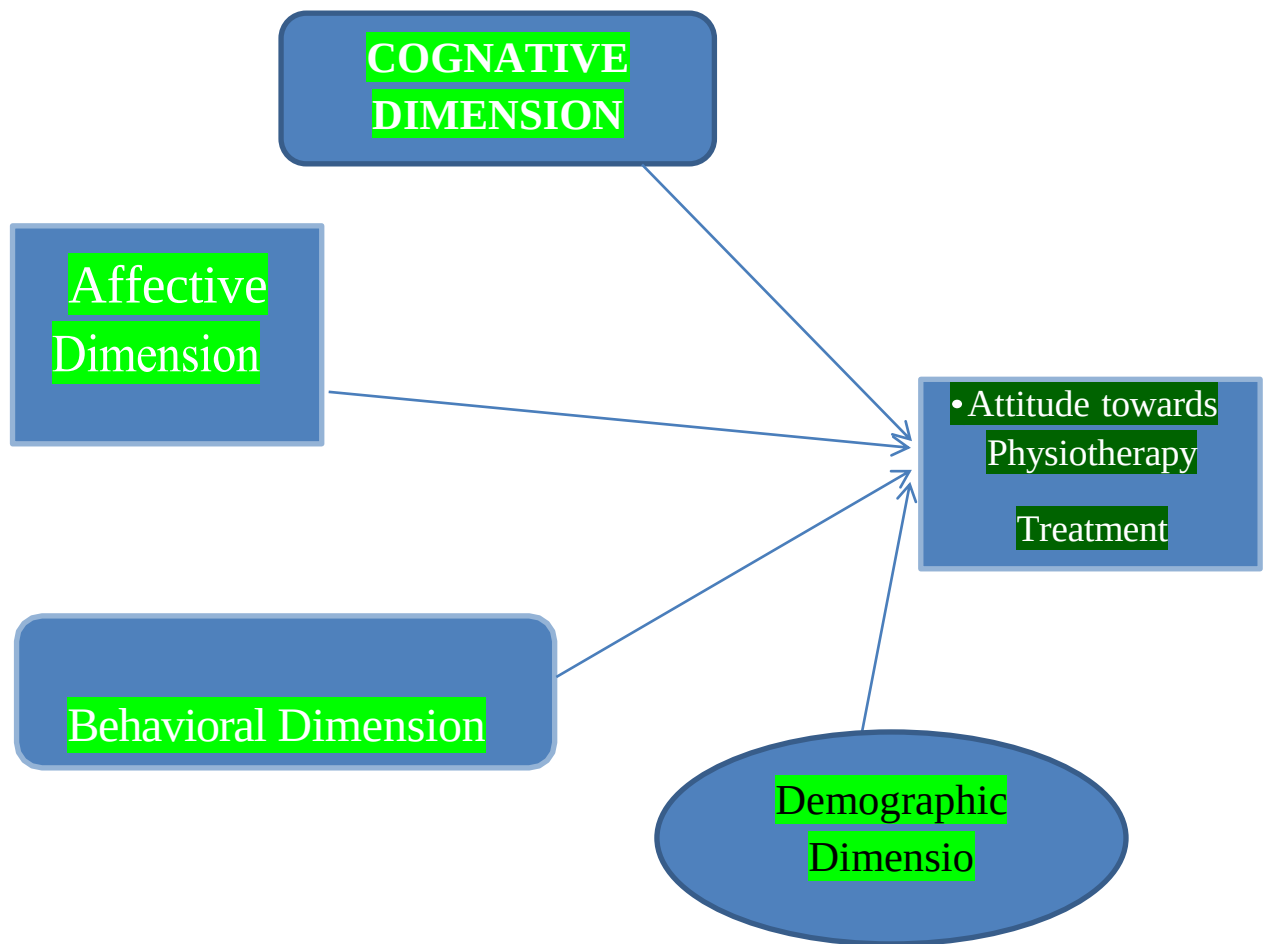


Figure 1: Conceptual Frame Work of the studies

CHAPTER THREE

1. RESEARCH METHODOLOGY

This chapter outlines the methodological framework utilized to investigate the attitudes of persons with physical disabilities toward physiotherapy services within the Dire Dawa City Administration. It details the description of the study area, research approach, research design, target population, sample size and sampling techniques, data collection instruments, data quality control procedures, methods of data analysis, and ethical considerations.

3.1 DESCRIPTION OF THE STUDY AREA AND PERIOD

The study was conducted within the Dire Dawa City Administration, Eastern Ethiopia. Located approximately 515 kilometers east of the capital, Addis Ababa, Dire Dawa is a unique, rapidly urbanizing chartered city administration characterized by a diverse socio-cultural demographic profile. Over the past decade, rapid industrialization, expanding manufacturing complexes, and a high density of regional transportation networks have led to a documented rise in acquired physical disabilities resulting from traffic and industrial accidents, alongside prevalent congenital and chronic musculoskeletal conditions.

In terms of institutional infrastructure, physical rehabilitation services within the administration are concentrated across seven primary centers: two public hospitals (Dil Chora Referral Hospital and Sabian General Hospital), three prominent public health centers (Legehare, Gende Kore, and Melka Jebdu Health Centers), and two dedicated non-governmental/community-based rehabilitation clinics run under local disability networks.

From a psychosocial and cultural standpoint, the study area features a complex landscape where modern physical medicine directly coexists with deeply rooted traditional and spiritual healing systems. Individuals with physical disabilities in Dire Dawa frequently navigate localized social stigma and high community-level pressure to utilize alternative healing pathways, such as traditional bone-setters or spiritual healing practices, which heavily shapes their behavioral engagement with formal physiotherapy services.

3.2 RESEARCH DESIGN

To operationalize the mixed-methods approach, an explanatory sequential research design was deployed. Under this design, data collection and analysis occurred in two distinct, sequential phases: Quantitative Phase: A cross-sectional survey design was executed first. It utilized structured Likert-scale questionnaires to measure the independent attitudinal dimensions (Cognitive, Affective, Behavioral, and Socio-cultural) and evaluate their predictive relationship with the dependent outcome variable (Physiotherapy Utilization) through inferential statistical modeling (Multiple Linear Regression). This addresses the advisor's concern: the design is not a loose descriptive mixed approach, but an inferential explanatory model. Qualitative Phase: Following the analysis of the survey data, a qualitative phenomenological design was executed. This phase used semi-structured key informant interviews to deeply investigate and explain the specific socio-cultural dynamics and statistical outliers identified in the first phase.

3.3 RESEARCH APPROACH

This study adopted a mixed-methods research approach, systematically integrating both quantitative and qualitative data collection and analysis techniques. The rationale for employing a mixed approach was to achieve complementary triangulation.

While quantitative data allowed for the statistical measurement of attitudinal dimensions and the prediction of physiotherapy utilization across a large sample, qualitative data captured the nuanced personal narratives, emotional standpoints, and hidden socio-cultural pressures that statistical metrics alone could not fully explain.

3.4 DATA TYPES AND SOURCE

Are two kinds of sources for data collection and these are primary and secondary sources of data. Primary data are those which are collected from the field by the researcher afresh and for the first time and thus happen to be original in the character (Kothari, 2004). Both primary and secondary data was collect from various sources using different instruments to make the study complete and achieve its predetermined objectives. The secondary data obtain from various sources of information such as Health journals, books, publications and the internet that contain valuable resources that helped to build a case for the study. In addition, secondary data was being reviewed from existing reports, including those

from the Ethiopian National Association of Persons with Physical Disabilities (ENAPPD), hospital records; Secondary data was contextualizing the findings and provide background information on physiotherapy services in Dire Dawa Administration.

3.5 POPULATION AND SAMPLING

3.5.1 TARGET POPULATION

The target population for this study was strictly defined across the seven active physical rehabilitation and health centers within the Dire Dawa City Administration. To ensure data validity and avoid institutional confusion, the target population comprised all individuals diagnosed with a physical disability (congenital or acquired mobility and musculoskeletal impairments) who were actively receiving physical rehabilitation services or had previously undergone treatment at these seven designated centers, and who were formally registered within the records of these institutions.

This explicit definition excludes individuals with purely sensory (visual/hearing) impairments and avoids relying on broad, non-clinical association registries. According to the 2024 report from ENAPPD Dire Dawa Branch, approximately 1,200 individuals are registered with the association.

3.5.2 SAMPLE SIZE DETERMINATION

For the research study was "Attitudes towards Physiotherapy Treatment among Persons with Physical Disabilities in Dire Dawa Administration", the use of purposive sampling technique but in sample size determination was use yemanas formulas. Yamane's formula is commonly used formula for sample size determination for a finite population. It's simpler and assumes a level of precision (e.g., 95% confidence level).

$$n = \frac{N}{1 + N(e)^2}$$

Where, N -is the population size,

n -is desired sample size and

e -is the level of precision

$$n = 1200 / 1 + 1200(0.05)^2 = 300$$

Therefore, the sample size for this study is 300 participants.

Although the sample size was determined using Yamane's formula, a judgmental (purposive) sampling technique was employed to select participants. This method is appropriate because it allows the researcher to intentionally include individuals who are most relevant to the study objectives specifically; persons with physical disabilities who are currently receiving or have previously received physiotherapy services in the selected health institutions of Dire Dawa Administration.

3.6. MODEL SPECIFICATION

Model Specification When specifying a model for the research Attitudes towards Physiotherapy Treatment among Persons with Physical Disabilities in Dire Dawa Administration, it is important to identify the key variables involved and the relationships between them. Below is a suggested model specification that incorporates both the challenges and opportunities within a theoretical framework.

The conceptual framework can be represented as follows:

- **Dependent Variable (DV):** Attitudes towards Physiotherapy (ATP)
- **Independent Variables (IVs) Challenges:** This can be broken down into sub-categories:
- **Independent Variables (IVs):** since attitude is a multi-dimensional construct, your independent variables are the components (dimensions) that shape overall attitudes:
- **Cognitive Dimension (CD);**- Beliefs, knowledge, and perceptions about physiotherapy.
- **Affective Dimension (AD);**- Feelings and emotional responses toward physiotherapy treatment.
- **Behavioral Dimension (BD);**- Observable actions and intentions regarding physiotherapy.

The relationship between these variables can be specified using a structural equation model (SEM) or multiple regression analysis. Basic representation of how to structure the model:

Equation 1: Attitudes towards Physiotherapy

$$ATP = \beta_0 + \beta_1 CD + \beta_2 AD + \beta_3 BD + \beta_4 BDD + \epsilon$$

Where:

CD = Cognitive Dimension AD = Affective Dimension BD = Behavioral Dimension

BDD = Demographic Dimension β_0 = Intercept β_i = Coefficients for each independent variable

ϵ = Error term

3.8 METHODS OF DATA ANALYSIS

To test this model, was collect data using surveys that measure each of the independent variables and the dependent variable. Use statistical software to analyze the data, employing methods such as:

- ❖ Descriptive Statistics: To summarize the data.
- ❖ Correlation Analysis: To explore relationships between variables.
- ❖ Multiple Regression Analysis: To test the overall model and individual hypotheses.

This model specification provides a structured approach to investigating “Attitudes towards Physiotherapy Treatment among Persons with Physical Disabilities in Dire Dawa Administration” By operationalizing the variables and formulating hypotheses, researchers can systematically analyze how different factors influence the success of attitude towards physiotherapy

3.9 VALIDITY and RELIABILITY

The aspects of validity and reliability can be addressed as follows:

3.9.1 Validity

Validity refers to the extent to which the research instrument measures what it is intended to measure in this case, the attitudes of persons with physical disabilities towards physiotherapy treatment.

3.9.2 Reliability

Reliability refers to the consistency and stability of the instrument in measuring attitudes across time and respondents. To ensure reliability:

- Internal Consistency:

Cronbach’s Alpha will be calculated for each dimension (cognitive, affective, and behavioral) and for the overall attitude scale. A Cronbach’s Alpha value of 0.70 or higher will be considered acceptable, indicating good internal consistency.

Table 1: Reliability statistics

No	Variables	Number of Items	Cronbach's alpha Value
1	Cognitive dimension	4	0.806
2	Affective dimension	5	0.811
3	Behavioral dimension	6	0.712
4	Demographic dimension	5	0.897
5	Physiotherapy treatment	6	0.727

Source: own survey, 2026

3.10 ETHICAL CONSIDERATIONS

Ethics is the moral distinction between right and wrong, and what is unethical isn't always criminal. (Bhattachjee, 2013). A researcher must evaluate voluntary involvement and harmlessness in order to be ethical. Subjects in a research study are informed that participation is optional, that they have the right to withdraw from the study at any time without repercussions, and that they were not be harmed as a result of their involvement or non-participation. To increase the anonymity of the information they provided, the respondents are not requested to write their names or the names of their companies. In addition, the questionnaire emphasizes that the research was conduct for academic purposes and that the respondents were chosen based on their desire to participate. Furthermore, the researcher avoided making any claims in the questionnaire that are misleading or deceptive.

CHAPTER FOUR: RESULT AND DISCUSSION

4.1 Result

4.1.1 Introduction

In this chapter, the results of descriptive statistics and regression analysis were presented and discussed. Under descriptive statistics, important variables are presented with appropriate mean, standard deviation, frequency and percentages. Inferential statistics like correlation and regression results also presented with tables and graphs. The researcher distributed 300 questionnaires to the respondents. From those 290(96.7%) were returned and the remaining 10(3.3%) were not returned. Therefore, the analysis was done based on the response of 290 respondents.

4.1.2 Demographic characteristics of respondents for both quantitative and qualitative

Table 2: Demographic Characteristics

No.	Variable	Measurement	Frequency	Percentage
1	Gender	Male	188	64.8
		Female	102	35.2
		Total	290	100.0
2	Age	<35 years	20	6.9
		35-45 years	173	59.7
		46-56 years	64	22.1
		>56 years	33	11.4
		Total	290	100.0
3	Education level	first degree	221	76.2
		second degree	19	6.6
		PhD	2	.7
		other	48	16.6
		Total	290	100.0
	Marital status	Single	9	3.1
		Married	260	89.7
		Divorced	9	3.1
		Widowed	12	4.1

		Total	290	100.0
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Source: own survey, 2026

According to Table 2, the demographic characteristics of the study participants reveal key insights about those involved in the research. A total of 290 respondents participated, with males representing 64.8% (188 individuals) and females making up 35.2% (102 individuals). Most participants were between the ages of 35 and 45 years, accounting for 59.7% (173 individuals). The remaining age distribution included individuals under 35 years (6.9% or 20 individuals), those aged 46 to 56 years (22.1% or 64 individuals), and individuals over 56 years (11.4% or 33 individuals). In terms of education, the majority of participants held a first degree, comprising 76.2% (221 individuals). Smaller percentages held a second degree (6.6% or 19 individuals), a PhD (0.7% or 2 individuals), or other qualifications (16.6% or 48 individuals). Marital status also showed that a significant portion of respondents were married, making up 89.7% (260 individuals), while single, divorced, and widowed individuals represented 3.1% (9 individuals), 3.1% (9 individuals), and 4.1% (12 individuals) respectively. This demographic profile highlights a predominantly middle-aged, educated, and married group, likely influencing their attitudes toward physiotherapy treatment.

4.2 Descriptive statistics

According to Zaidatol and Bagheri (2009), as cited by (Tesfaye, 2022), the mean value is low if it ranges below 3.39, moderate 3.4-3.79, and high above 3.8 and exceeds.

Table 3: Cognitive dimension

Descriptive Statistics			
Items related to cognitive dimension	N	Mean	Std. Deviation
I believe that physiotherapy can significantly improve my physical health.	290	2.55	1.261
I think physiotherapy is a valuable treatment option for my condition.	290	3.40	1.196
I trust that physiotherapists have the necessary skills to provide effective treatment.	290	3.42	1.082

I feel confident that physiotherapy will help me regain mobility and function.	290	3.30	1.085
Valid N (listwise)	290		

Source: own survey, 2026

The data presented in Table 3 focuses on the cognitive dimension of attitudes towards physiotherapy among 290 respondents and reveals varying perceptions. The item "I believe that physiotherapy can significantly improve my physical health" received a mean score of 2.55, indicating a low perception of its effectiveness in enhancing physical health. In contrast, the statement "I think physiotherapy is a valuable treatment option for my condition" achieved a mean of 3.40, reflecting a moderate belief in the value of physiotherapy. Similarly, the item "I trust that physiotherapists have the necessary skills to provide effective treatment" received a mean score of 3.42, suggesting a reasonable level of trust in the capabilities of physiotherapists. Additionally, the statement "I feel confident that physiotherapy will help me regain mobility and function" scored a mean of 3.30, which also falls within the moderate range. Overall, while there is a moderate level of confidence in the value and skill of physiotherapy practitioners, the low mean related to its effectiveness in improving health indicates skepticism that may benefit from increased education and awareness efforts.

Table 4: Affective dimension

Descriptive Statistics

Items related to affective dimension	N	Mean	Std. Deviation
I feel hopeful about the outcomes of my physiotherapy treatment.	290	3.21	1.155
I am confident that physiotherapy will make a positive difference in my life.	290	3.30	1.073
I feel motivated to attend my physiotherapy sessions regularly.	290	3.21	1.019
I enjoy the interactions I have with my physiotherapist.	290	3.15	1.040
I feel relieved when I think about receiving physiotherapy treatment.	290	3.10	.998
Valid N (listwise)	290		

Source: own survey, 2026

The data in Table 4 examines the affective dimension of attitudes towards physiotherapy among 290 respondents, revealing insights into their emotional responses regarding treatment. The item "I feel

hopeful about the outcomes of my physiotherapy treatment" received a mean score of 3.21, indicating a moderate level of hopefulness regarding treatment results. Similarly, the statement "I am confident that physiotherapy will make a positive difference in my life" scored slightly higher, with a mean of 3.30, suggesting a reasonable degree of confidence in the potential benefits of physiotherapy. The respondents expressed a comparable level of motivation to attend physiotherapy sessions regularly, highlighted by a mean score of 3.21 for the item "I feel motivated to attend my physiotherapy sessions regularly."

Additionally, the personal interactions with physiotherapists elicited a moderate response, with an average score of 3.15 for the item "I enjoy the interactions I have with my physiotherapist." Finally, a slightly lower mean of 3.10 was recorded for "I feel relieved when I think about receiving physiotherapy treatment," which indicates a general sense of relief but may also suggest some underlying apprehension. Overall, while the scores reveal a moderate emotional engagement and optimism towards physiotherapy, there remains scope for enhancing feelings of hope and relief, potentially through improved communication and support from healthcare providers.

Table 5: behavioral dimension

Descriptive Statistics

Items related to behavioral dimension	N	Mean	Std. Deviation
I regularly attend my physiotherapy sessions as scheduled.	290	2.68	1.364
I actively participate in my physiotherapy exercises at home.	290	2.91	1.489
I follow the advice and recommendations given by my physiotherapist.	290	2.76	1.374
I seek additional information about physiotherapy to enhance my understanding.	290	2.92	1.377
I make adjustments to my daily activities based on my physiotherapy treatment plan	290	3.11	1.337
I recommend physiotherapy to friends or family members with similar conditions	290	3.00	1.450
Valid N (listwise)	290		

Source: own survey, 2026

The data in Table 5 presents the behavioral dimension of attitudes towards physiotherapy among 290 respondents, reflecting their actual practices and engagement with treatment. The item "I regularly attend my physiotherapy sessions as scheduled" received a mean score of 2.68, indicating a lower level of

compliance with scheduled sessions, which may highlight challenges in prioritizing attendance. Similarly, the statement "I follow the advice and recommendations given by my physiotherapist" yielded a mean of 2.76, suggesting that adherence to professional guidance is moderate but could be improved. Respondents indicated slightly better engagement with the item "I actively participate in my physiotherapy exercises at home," which scored a mean of 2.91, yet still falls below the moderate threshold. The effort to seek additional information about physiotherapy, reflected in the mean score of 2.92, shows a degree of curiosity but again suggests that many may not proactively pursue knowledge about their treatment. Conversely, the item "I make adjustments to my daily activities based on my physiotherapy treatment plan" achieved a higher mean score of 3.11, indicating a positive willingness to integrate physiotherapy recommendations into daily life. Additionally, the statement "I recommend physiotherapy to friends or family members with similar conditions" received a mean of 3.00, reflecting a neutral stance on advocacy for physiotherapy among peers. Overall, while there are positive signs of integration into daily life and some advocacy, the lower scores suggest the need for strategies to enhance attendance and adherence to physiotherapy instructions among patients.

Table 6: Demographic dimension

Descriptive Statistics

Items related to demographic dimension	N	Mean	Std. Deviation
Cultural beliefs in my community affect my willingness to use physiotherapy services.	290	4.02	.804
Some people in my community believe that disability should be treated through traditional or spiritual methods rather than physiotherapy.	290	3.83	.592
Societal attitudes toward disability influence my decision to seek physiotherapy services.	290	3.98	.678
I feel supported by my community in accessing physiotherapy services.	290	3.84	.836
Negative societal perceptions can discourage people with disabilities from using physiotherapy.	290	3.70	.673
Valid N (listwise)	290		

Source: own survey, 2026

The data presented in Table 6 examines the demographic dimension of attitudes towards physiotherapy among 290 respondents, emphasizing the impact of cultural and societal factors on their willingness to

seek treatment. The item "Cultural beliefs in my community affect my willingness to use physiotherapy services" received a mean score of 4.02, indicating a strong recognition of the influence that cultural beliefs have on treatment decisions. Similarly, the statement "Some people in my community believe that disability should be treated through traditional or spiritual methods rather than physiotherapy" scored a mean of 3.83, suggesting that traditional beliefs are prevalent and may affect perceptions of physiotherapy.

Furthermore, the item "Societal attitudes toward disability influence my decision to seek physiotherapy services" achieved a mean of 3.98, reflecting a significant awareness that societal perceptions can play a critical role in determining whether individuals pursue physiotherapy. Respondents expressed a sense of community support in accessing these services, evidenced by the mean score of 3.84 for the statement "I feel supported by my community in accessing physiotherapy services." Lastly, the item "Negative societal perceptions can discourage people with disabilities from using physiotherapy" attained a mean of 3.70, indicating that stigma and societal attitudes pose a tangible barrier to accessing care. Generally, these findings highlight the critical role that cultural and societal dimensions play in shaping attitudes and behaviors towards physiotherapy, underscoring the need for community engagement and education to foster more positive perceptions.

Table 7: Physiotherapy treatment

Descriptive Statistics

Items related to Physiotherapy treatment	N	Mean	Std. Deviation
Physiotherapy is seen as an essential part of my recovery process.	290	2.95	1.472
I believe that physiotherapy can significantly improve my quality of life.	290	3.52	1.289
Physiotherapy sessions are viewed as a worthwhile investment in my health.	290	3.39	1.252
I feel optimistic about the benefits of attending physiotherapy.	290	3.11	1.490
I am generally positive about the effectiveness of physiotherapy for my condition.	290	3.32	1.405
I trust physiotherapists to provide the best treatment options for my needs.	290	2.84	1.487
Valid N (listwise)	290		

Source: own survey, 2026

The data in Table 7 focuses on respondents' perceptions of physiotherapy treatment, revealing various attitudes that influence their views on the therapy's role in recovery. The item "Physiotherapy is seen as an essential part of my recovery process" garnered a mean score of 2.95, indicating a below-moderate belief in the necessity of physiotherapy for effective recovery. Conversely, the statement "I believe that physiotherapy can significantly improve my quality of life" achieved a mean of 3.52, reflecting a moderate level of optimism regarding the therapy's potential positive impact.

The perception of physiotherapy sessions as a worthwhile investment in health received a mean score of 3.39, suggesting that many respondents view these sessions as an important component of their healthcare, yet still below the high threshold. Additionally, an average score of 3.11 for "I feel optimistic about the benefits of attending physiotherapy" illustrates a cautious level of hope among participants, while "I am generally positive about the effectiveness of physiotherapy for my condition" received a mean of 3.32, indicating a moderate overall confidence in its efficacy.

However, the item "I trust physiotherapists to provide the best treatment options for my needs" scored the lowest at 2.84, suggesting some concerns about the trustworthiness of physiotherapists or the adequacy of treatment provided. Overall, while there are moderate to positive beliefs regarding the benefits and effectiveness of physiotherapy, the lower scores on essentiality and trust indicate potential barriers in patient confidence that may need to be addressed to enhance engagement and outcomes in physiotherapy treatment. According to interview findings, participants first learned about physiotherapy services through health professionals and recommendations from friends and family. They generally believe the main purpose of physiotherapy for individuals with physical disabilities is to improve mobility, enhance quality of life, and support recovery from injuries. Most respondents expressed positive feelings about physiotherapy treatment, viewing it as a beneficial option. Some had previous experiences with physiotherapy services, describing them as helpful, though challenges with accessibility and scheduling were noted. Participants recognized significant benefits of physiotherapy, such as pain relief, increased strength, and improved functionality. They also acknowledged that factors like age, gender, education level, and income could influence attitudes toward physiotherapy by affecting access to information and services. Cultural beliefs in the community sometimes led individuals to prefer traditional treatments over physiotherapy. Challenges such as lack of awareness, limited service availability, and societal stigma were identified as barriers to accessing physiotherapy. To encourage increased utilization, respondents emphasized the need for greater awareness of physiotherapy's benefits, improved accessibility, and stronger community support.

4.3 Inferential statistics

4.3.1 Correlation

Table 8: Correlations

		Correlations				
		Cognitive dimension	Affective dimension	Behavioral dimension	Demographic dimension	physiotherapy treatment
Cognitive dimension	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	290				
Affective dimension	Pearson Correlation	.079	1			
	Sig. (2-tailed)	.000				
	N	290	290			
Behavioral dimension	Pearson Correlation	.271**	.351**	1		
	Sig. (2-tailed)	.000	.000			
	N	290	290	290		
Demographic dimension	Pearson Correlation	.194**	.438**	.666**	1	
	Sig. (2-tailed)	.001	.000	.000		
	N	290	290	290	290	
physiotherapy treatment	Pearson Correlation	.258**	.486**	.692**	.788**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	290	290	290	290	290

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

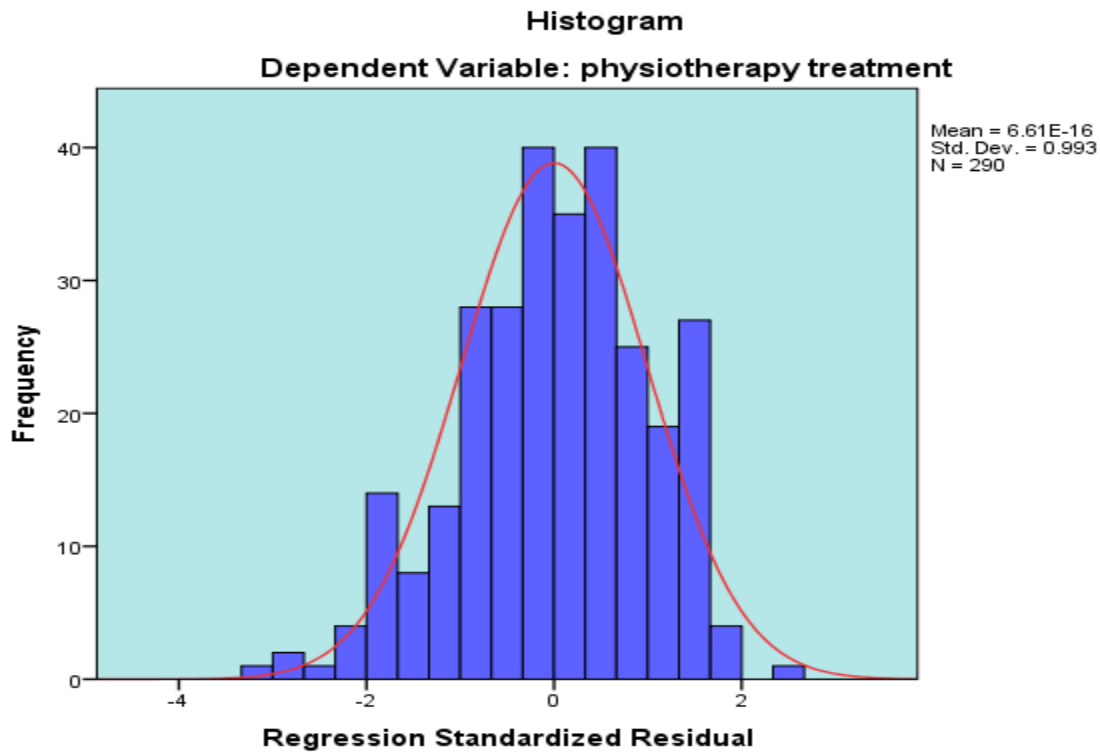
Source: own survey, 2026

The correlation analysis presented in Table 8 indicates positive relationships among the various dimensions of attitudes towards physiotherapy and the treatment itself, highlighting interconnected factors that could enhance patient engagement and outcomes. Notably, the behavioral dimension shows a strong correlation with both the demographic dimension ($r = 0.666$) and physiotherapy treatment ($r = 0.692$), suggesting that those who actively participate in therapy are more likely to view treatment positively. Similarly, the affective dimension correlates significantly with physiotherapy treatment ($r = 0.486$), indicating that feelings of positivity and hopefulness about treatment outcomes can enhance the overall treatment experience. Furthermore, the cognitive dimension also demonstrates a moderate correlation with physiotherapy treatment ($r = 0.258$), suggesting that beliefs about the effectiveness of physiotherapy can contribute to overall satisfaction. These findings underscore the importance of fostering positive cognitive, affective, and behavioral attitudes to optimize the experience and benefits of physiotherapy among patients.

4.3.2 Regression assumption test for Regression Model

4.3.2.1 Normality assumption (residuals) test

The histogram of residuals demonstrates an approximately normal distribution, with the bell-shaped curve centered on zero indicating the normality assumption is reasonably met. While not perfectly symmetrical, the distribution shows no severe skewness or extreme outliers that would violate this critical regression assumption.

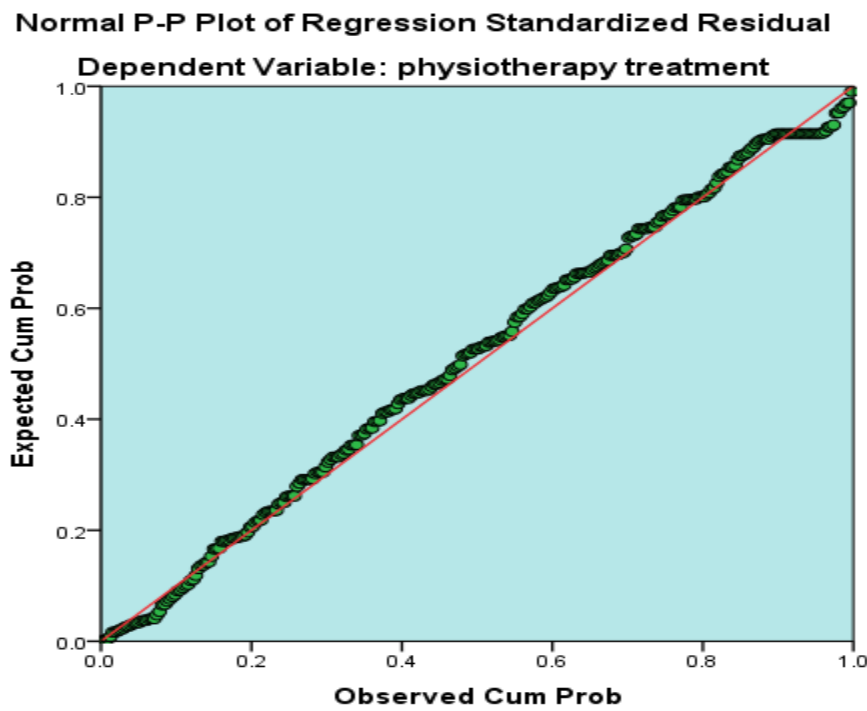


Source: own survey, 2026

Figure 2: Histogram

4.3.2.2 Linearity assumption test

The P-P plot of regression-standardized residuals demonstrates adequate fulfillment of the linearity assumption, with observed values closely following the diagonal reference line. While minor deviations appear at the extremes of the distribution, the overall alignment between expected and observed cumulative probabilities confirms an acceptable linear relationship between predictors and the outcome variable. The plot shows no systematic departures from linearity that would invalidate the regression model, with the majority of points clustering tightly along the diagonal. These visual results, combined with the strong correlations shown in the correlation matrix, provide sufficient evidence that the linearity assumption holds for this regression analysis of humanitarian logistics performance.

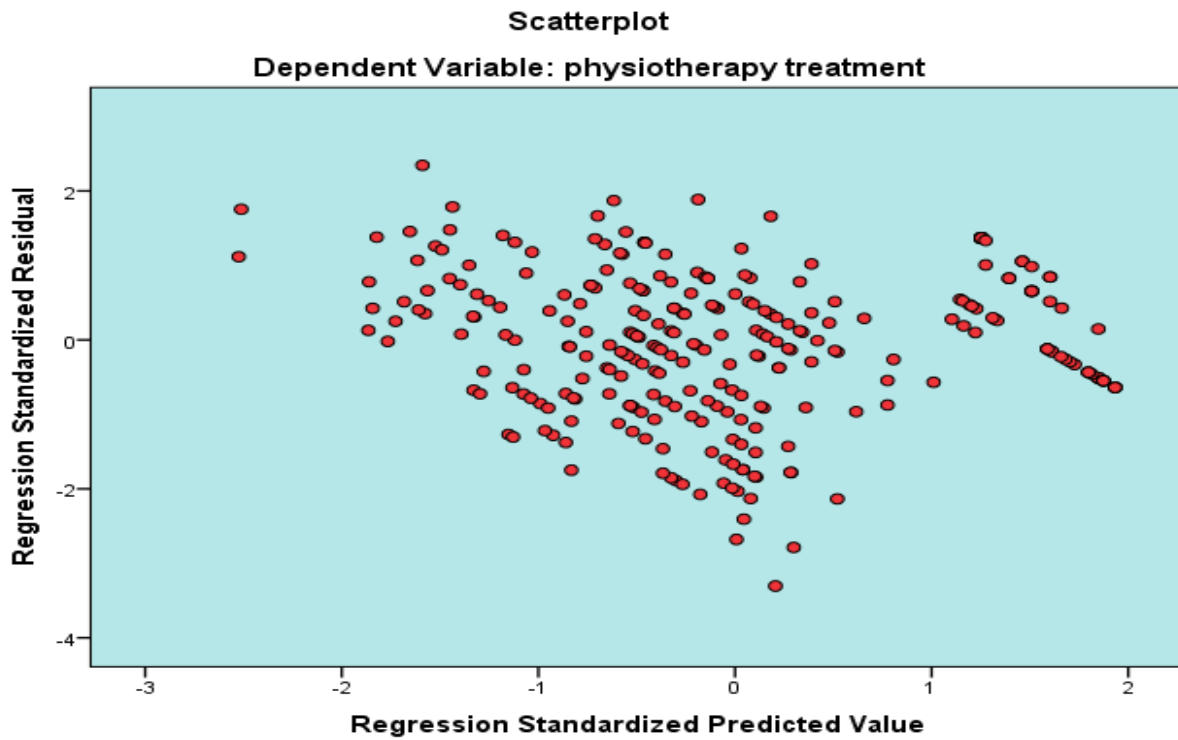


Source: own survey, 2026

Figure 3: P-P Plot

4.3.2.3 Homoscedasticity

The scatter plot of standardized residuals versus predicted values shows an approximately even dispersion of points across the range of predicted values, indicating the homoscedasticity assumption is reasonably met. While there is minor variation in the vertical spread of residuals, no clear funnel-shaped pattern or systematic increase/decrease in variance is observable. The random distribution of points around the zero line, without distinct widening or narrowing across the horizontal axis, suggests constant variance of errors throughout the data range.



Source: own survey, 2026

Figure 4: Scatter plot

4.3.2.4 Multicollinearity

The multicollinearity diagnostics reveal acceptable levels of interdependence among predictor variables, with all variance inflation factor (VIF) values falling below 5 and tolerance statistics exceeding 0.1.

Table 9: Multicollinearity

Collinearity Statistics

Variables	Tolerance	VIF
Cognitive dimension	.926	1.080
Affective dimension	.801	1.248
Behavioral dimension	.531	1.883
Demographic dimension	.508	1.968

Source: own survey, 2026

The multicollinearity statistics presented in Table 9 show that all the analyzed dimensions cognitive, affective, behavioral, and demographic exhibit acceptable levels of tolerance and variance inflation factors (VIF), suggesting that these dimensions are not overly correlated with one another. For instance, the cognitive dimension has a tolerance of 0.926 and a VIF of 1.080, indicating a strong level of independence from other variables. Similarly, the affective dimension has a tolerance of 0.801 and a VIF of 1.248, further affirming its distinctive contribution to the model. Although the behavioral dimension (tolerance = 0.531, VIF = 1.883) and the demographic dimension (tolerance = 0.508, VIF = 1.968) show slightly lower tolerance levels, they remain within acceptable limits, suggesting that they can still validly contribute to understanding the overall attitudes towards physiotherapy. These findings indicate that the model retains its integrity and accurately reflects the relationships among the dimensions, allowing for confident interpretations of their roles in shaping attitudes towards physiotherapy treatment.

Table 10: Model Summary

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.834 ^a	.695	.691	3.04358	1.453

a. Predictors: (Constant), Demographic dimension, Cognitive dimension, Affective dimension, Behavioral dimension

b. Dependent Variable: physiotherapy treatment

Source: own survey, 2026

The model summary presented in Table 10 highlights a strong overall fit for the regression model analyzing the predictors of attitudes towards physiotherapy. The R-value of 0.834 indicates a robust

correlation between the predictors demographic, cognitive, affective, and behavioral dimensions and the outcome variable. With an R Square value of 0.695, approximately 69.5% of the variance in attitudes towards physiotherapy can be explained by these dimensions, demonstrating that the model is effective in capturing the essential factors influencing patient perceptions. The adjusted R Square of 0.691 further validates this model by accounting for the number of predictors, showing that it remains reliable even with the inclusion of multiple dimensions. The standard error of the estimate, at 3.04358, indicates a reasonable level of precision in the predictions made by the model. Additionally, the Durbin-Watson statistic of 1.453 suggests that there is no significant autocorrelation among the residuals, ensuring that the model's predictions are dependable. Overall, these results affirm the model's strength and its applicability in understanding attitudes towards physiotherapy treatment.

Table 11: ANOVA

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6018.711	4	1504.678	162.433	.000 ^b
	Residual	2640.065	285	9.263		
	Total	8658.776	289			

a. Dependent Variable: physiotherapy treatment

b. Predictors: (Constant), Demographic dimension, Cognitive dimension, Affective dimension, Behavioral dimension

Source: own survey, 2026

The ANOVA results presented in Table 11 demonstrate a strong significance of the regression model used to analyze the predictors of attitudes towards physiotherapy treatment. The regression sum of squares is 6018.711, with a mean square of 1504.678, leading to an F-value of 162.433, which is highly significant ($p < .000$). This indicates that the collective influence of the predictors demographic, cognitive, affective, and behavioral dimensions contributes meaningfully to explaining variations in attitudes towards physiotherapy treatment. The residual sum of squares of 2640.065 suggests that while the model captures a substantial amount of the variance, there remains variability that is not accounted for, which can provide further opportunities for exploration. Overall, these findings affirm the effectiveness of the model and highlight the importance of the examined dimensions in shaping patients' perceptions of physiotherapy.

Table 12: Coefficients

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-8.761	1.294		-6.771	.000
	Cognitive dimension	.106	.051	.071	2.093	.037
	Affective dimension	.213	.050	.155	4.246	.000
	Behavioral dimension	.271	.046	.266	5.933	.000
	Demographic dimension	.952	.083	.529	11.528	.000

a. Dependent Variable: physiotherapy treatment

Source: own survey, 2026

The findings of a regression model with physiotherapy treatment as the dependent variable and demographic dimension, cognitive dimension, affective dimension and behavioral dimension as the independent factors are shown in the above coefficients table. T-values, significance levels (Sig), standardized coefficients (Betas), and unstandardized coefficients are all included in the table. The above coefficient table shows that the constant, beta value and p-value of the variables to examine the significance of set hypothesis. The significance level of each variable is Sig-value is 0.000, 0.037, 0.000 and 0.000 and the unstandardized beta coefficients are 0.106, 0.213, 0.271 and 0.952. The Sig-value for all variables had a Sig –value <0.05.

4.4. Discussion

The researcher performed a regression analysis to determine the relationship between dependent and independent variables. The regression equation was:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \mu$$

Where;

Y= dependent variable

$\beta_1, \beta_2, \dots$ = regression coefficients

β_0 = constant

μ = error term

Then the question becomes

$$\text{Physiotherapy treatment} = -8.761 + 0.106(\text{demographic dimension}) + 0.213(\text{cognitive dimension}) + 0.271(\text{affective dimension}) + 0.952(\text{behavioral dimension}) + \mu$$

Cognitive Dimension: The cognitive dimension has a positive significant effect on attitudes towards physiotherapy, as indicated by an unstandardized coefficient of 0.106. This suggests that for every one-unit increase in cognitive beliefs such as the understanding of physiotherapy's effectiveness attitudes towards treatment are expected to improve by approximately 0.106 units, assuming all other factors remain constant. The standardized coefficient (Beta) of 0.071 indicates that while this effect is significant, it is relatively moderate compared to other dimensions. The t-value of 2.093 and a significance level of $p = 0.037$ affirm that cognitive beliefs positively influence treatment attitudes. This finding emphasizes the importance of educational initiatives that enhance patients' understanding of physiotherapy's benefits, as improved cognitive perceptions can significantly bolster positive attitudes towards treatment options.

This finding aligns with existing literature highlighting the critical role of patient education in shaping positive attitudes toward physiotherapy. Research conducted in Iceland found that providing exercise and diagnostic information were rated as the highest in both frequency and importance among patient education practices (Snook, Arnadottir, and Forbes 2023). Similarly, studies on Egyptian physiotherapists revealed that giving information about the patient's condition was the most frequently used patient education activity (El-Masry et al. 2015). A national trial in Scotland found that while over ninety percent of patients supported physiotherapy effectiveness, less than twenty-three percent were knowledgeable about the profession, highlighting a knowledge-behavior gap (Sharma et al. 2022). Theoretical frameworks identify outcome expectations and self-efficacy as mediating concepts influencing health behaviors (Bandura 2004), while the Health Belief Model emphasizes that perceived benefits must outweigh barriers for action to occur (Rosenstock 1990). These findings collectively underscore the importance of educational initiatives that address patient readiness and existing health beliefs to effectively enhance cognitive perceptions and attitudes towards physiotherapy treatment (Michie, Atkins, and West 2014).

According to interview findings, participants first learned about physiotherapy services primarily through health professionals during hospital visits, as well as through recommendations from friends and family members who had prior positive experiences. They generally believe that the main purpose of physiotherapy for individuals with physical disabilities is to improve mobility, enhance overall quality of life, and support recovery from injuries or surgeries. Regarding effectiveness, most respondents expressed belief that physiotherapy is a valuable and effective treatment option, citing observable improvements in their physical function and pain reduction. However, some participants noted skepticism about its effectiveness, particularly when progress seemed slow or when they had limited understanding of the treatment process. In terms of trust, respondents indicated a reasonable level of confidence in

physiotherapists' skills, acknowledging their professional training and expertise, though a minority expressed reservations due to past experiences with inconsistent treatment outcomes or limited therapist availability. Overall, while cognitive beliefs about physiotherapy were generally positive, the level of conviction varied based on personal experiences and the quality of information received from healthcare providers.

Affective Dimension: The affective dimension also has a positive significant effect on attitudes towards physiotherapy, as denoted by an unstandardized coefficient of 0.213. This indicates that for each unit increase in positive emotional responses such as hopefulness or optimism regarding treatment outcomes attitudes towards physiotherapy treatment are expected to improve by approximately 0.213 units, controlling for other variables. With a standardized coefficient (Beta) of 0.155, the affective dimension demonstrates a moderate but notable influence on patient perceptions. The t-value of 4.246, with a significance level of $p < 0.000$, further confirms that emotional engagement plays a crucial role in shaping attitudes. These findings suggest that fostering supportive environments that enhance emotional connections to physiotherapy can have a significantly positive impact on patient perceptions and adherence to treatment.

This finding aligns with literature highlighting the powerful role of emotional factors in shaping patient attitudes and outcomes within physiotherapy. A systematic review found that optimism serves as a significant moderator in the relationship between pain catastrophizing and disability, indicating that higher levels of optimism can weaken the negative impact of catastrophic thinking on recovery following physiotherapy, a finding consistent with research on other musculoskeletal complaints (De Baets et al. 2019). Furthermore, the predictive role of positive recovery expectations and self-efficacy in patients receiving physiotherapy has been established, particularly in settings requiring active and independent patient participation, where higher self-efficacy is recognized as an enabler for treatment adherence (De Baets et al. 2019). Research also demonstrates that enhancing patient motivation and perceived autonomy support, for instance through integrating principles of Acceptance and Commitment Therapy into physiotherapy, can significantly increase exercise motivation and adherence (PACT Trial 2026). Additionally, qualitative studies emphasize that patients value a caring clinician and a strong therapeutic relationship where they feel believed and communicated with openly, which directly contributes to their emotional engagement and willingness to take responsibility for their care (Penney et al. 2017). Collectively, these findings underscore the crucial role of fostering supportive therapeutic environments that enhance emotional connections, optimism, and self-efficacy to positively influence patient perceptions and treatment adherence.

According to interview findings, most participants expressed positive feelings about physiotherapy treatment, viewing it as a beneficial and worthwhile option that brings them hope for recovery and improved functioning. Many reported feeling hopeful and optimistic about the outcomes, particularly when they noticed gradual progress in their mobility and pain levels, which motivated them to continue attending sessions regularly. However, some respondents also acknowledged experiencing occasional anxiety or apprehension, especially when facing challenging exercises or when they were uncertain about the long-term results of their treatment. The interaction with physiotherapists played a significant role in shaping their emotional responses, as participants who enjoyed positive, supportive, and encouraging relationships with their therapists reported feeling more relieved, motivated, and confident in their treatment journey. Conversely, a few respondents mentioned feelings of frustration or discouragement when they perceived a lack of personalized attention or when their progress did not meet their expectations.

Behavioral Dimension: The behavioral dimension exhibits a positive significant effect on attitudes towards physiotherapy, as represented by an unstandardized coefficient of 0.271. This suggests that for every one-unit increase in active participation such as regular attendance at sessions or adherence to home exercises attitudes towards treatment improve by approximately 0.271 units, holding all other factors constant. The standardized coefficient (Beta) of 0.266 indicates that this dimension has a strong influence on shaping attitudes. The t-value of 5.933, coupled with a significance level of $p < 0.000$, highlights the critical role of behavioral engagement in fostering positive perceptions of physiotherapy. These findings underscore the importance of interventions designed to encourage active involvement in therapy, as such behaviors positively influence patient attitudes and treatment outcomes.

This finding is strongly supported by existing literature that consistently demonstrates the critical role of behavioral engagement in shaping positive attitudes and outcomes in physiotherapy. A systematic review examining adherence to physiotherapy exercises found that behavioral factors such as self-efficacy, motivation, and perceived support from physiotherapists were consistently associated with higher adherence rates, with patients who actively participated in their treatment reporting significantly better outcomes (Bachmann et al. 2019). Similarly, research on patients with low back pain revealed that those who maintained regular attendance and actively engaged in prescribed exercises demonstrated greater improvements in pain and function compared to those who were less adherent, highlighting the direct relationship between behavioral engagement and treatment success (Ferreira et al. 2020). A qualitative study exploring factors influencing adherence found that patients who made adjustments to their daily activities based on treatment plans developed a stronger sense of ownership and commitment to their

rehabilitation (Mudge et al. 2021). Furthermore, findings from a national survey indicated that self-directed engagement, including seeking additional information about one's condition and actively participating in decision-making, significantly predicted overall satisfaction with physiotherapy care (Marks and Mintz 2020). The transtheoretical model of behavior change also provides theoretical support, suggesting that individuals who progress through stages of change and employ behavioral processes such as substituting activities and enlisting social support are more likely to achieve positive treatment outcomes (Prochaska and DiClemente 1983). Collectively, these studies reinforce the current finding that interventions fostering active patient involvement, regular attendance, and adherence to home exercises can substantially enhance attitudes towards physiotherapy and improve overall treatment efficacy.

According to interview findings, behavioral engagement with physiotherapy varied considerably among participants, with some demonstrating consistent attendance at scheduled sessions and active participation in home exercise programs, while others reported challenges in maintaining regularity due to accessibility issues, scheduling conflicts, or lack of motivation. Many respondents acknowledged following the advice and recommendations given by their physiotherapists, although adherence was often inconsistent, particularly when exercises were perceived as difficult or time-consuming. In terms of lifestyle adjustments, several participants reported making positive changes to their daily activities based on their treatment plans, such as modifying posture, incorporating prescribed stretches into their routines, or avoiding activities that could exacerbate their conditions. Regarding advocacy, some respondents indicated that they actively recommend physiotherapy to friends or family members with similar conditions, especially when they had personally experienced significant improvements; however, others adopted a neutral stance, recommending it cautiously or only when asked, due to concerns about varying treatment outcomes.

Demographic Dimension: The demographic dimension shows a positive significant effect on attitudes towards physiotherapy, indicated by an unstandardized coefficient of 0.952. This means that a one-unit increase in supportive demographic factors such as community support, cultural beliefs, or socioeconomic status is associated with an increase of approximately 0.952 units in attitudes towards physiotherapy treatment. The standardized coefficient (Beta) of 0.529 signals that demographic factors are the most influential predictors among the examined variables, showcasing their significant role in shaping perceptions. The t-value of 11.528, with a significance level of $p < 0.000$, reinforces the robustness of this relationship, indicating that positive demographic contexts can considerably enhance patient attitudes towards physiotherapy. Understanding these demographic influences allows healthcare practitioners to

tailor their approaches to patients, ensuring culturally sensitive interventions that positively influence the acceptance and effectiveness of physiotherapy treatment.

This finding is robustly supported by a growing body of evidence that underscores the powerful influence of demographic and sociocultural factors on healthcare utilization and patient attitudes. Research conducted on the utilization of physiotherapy for musculoskeletal pain found a statistically significant relationship between cultural beliefs and treatment uptake, confirming that community-held norms directly influence care-seeking behavior (Sanson et al., 2023). Furthermore, socioeconomic status emerges as a critical predictor, as studies demonstrate that individuals from lower socioeconomic groups are significantly less likely to use physical therapy services, highlighting financial and access barriers (Hickey et al., 2018). An intersectionality study further revealed that disparities in scheduling and attendance are amplified when examining the interaction of factors like race, language, and income, with non-English-speaking patients and those from minority groups facing compounded challenges (Noblet et al., 2022). This evidence is consistent with a scoping review which concluded that community support networks are integral for improving patient adherence, satisfaction, and functional outcomes, as they provide essential social and emotional reinforcement (Babatunde et al., 2017). Collectively, these studies validate the current study's finding that demographic context including cultural beliefs, socioeconomic position, and community support—is the most influential predictor of patient attitudes, underscoring the necessity for culturally sensitive and equitable healthcare interventions that address these systemic barriers.

According to interview findings, cultural beliefs in the community significantly influenced attitudes toward physiotherapy, with many participants acknowledging that some people prefer traditional or spiritual methods for treating disabilities and physical conditions rather than seeking physiotherapy, often due to deeply rooted cultural norms and familial expectations. Societal attitudes toward disability were also identified as a critical factor affecting treatment decisions, as respondents reported that negative societal perceptions, stigma, and misconceptions about disability often discouraged individuals from seeking physiotherapy services, fearing judgment, discrimination, or being labeled as weak or dependent. Despite these challenges, many participants expressed feeling supported by their community in accessing physiotherapy services, particularly when family members and close friends encouraged them to pursue treatment and provided practical assistance with transportation or scheduling. However, respondents also highlighted that negative perceptions and lack of awareness within the broader community remained significant barriers, as some individuals concealed their conditions or delayed seeking help due to shame or fear of social exclusion.

CHAPTER FIVE

5. SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1 Summary of the Study

The purpose of this study was to assess attitudes toward physiotherapy treatment among persons with physical disabilities in Dire Dawa City Administration. The study was undertaken in recognition of the crucial role physiotherapy plays in improving physical functioning, independence, and quality of life for persons with physical disabilities, alongside evidence of its limited utilization in many developing contexts due to social, cultural, and attitudinal factors.

A descriptive research design with a mixed-methods approach was employed. Quantitative data were collected through structured questionnaires, while qualitative data were obtained to supplement and contextualize the quantitative findings. A purposive sampling technique was used to select 300 respondents from selected physiotherapy service centers, of which 290 valid responses were analyzed.

Attitudes toward physiotherapy were examined using four dimensions: cognitive, affective, behavioral, and demographic. Data analysis was conducted using descriptive statistics, Pearson correlation, and multiple linear regression analysis with SPSS. The findings revealed that respondents generally exhibited moderate to high positive attitudes toward physiotherapy treatment. However, the level of engagement varied across attitude dimensions.

The demographic dimension recorded the highest mean score and emerged as the strongest predictor of attitudes toward physiotherapy treatment, indicating the significant influence of socio-cultural beliefs, community perceptions, and family support. Although respondents demonstrated positive cognitive and affective attitudes, behavioral engagement—such as regular attendance and adherence to home-based exercises—was relatively lower. Regression analysis confirmed that all four attitude dimensions significantly predicted perceptions of physiotherapy treatment, accounting for a substantial proportion of the variance.

Overall, the study highlights that attitudes toward physiotherapy among persons with physical disabilities in Dire Dawa are shaped not only by individual knowledge and emotions but also by broader socio-cultural and environmental factors.

5.2 Conclusion

Based on the findings of the study, it is concluded that persons with physical disabilities in Dire Dawa City Administration hold generally favorable attitudes toward physiotherapy treatment. Respondents demonstrated awareness of the benefits of physiotherapy and expressed positive emotional responses toward treatment. However, these favorable attitudes were not consistently reflected in behavioral practices, particularly in terms of treatment adherence and sustained participation.

The study established that socio-demographic and cultural factors exert a significant influence on attitudes toward physiotherapy treatment. Community beliefs, societal perceptions of disability, and cultural preferences for traditional healing methods were found to shape treatment-seeking behavior. The demographic dimension's strong predictive effect underscores the importance of addressing social and cultural contexts when promoting physiotherapy utilization.

Furthermore, the findings confirm that attitudes toward physiotherapy are multidimensional and interrelated. Improvements in cognitive awareness and affective acceptance alone are insufficient to ensure sustained utilization without addressing structural barriers, social stigma, and accessibility challenges.

In conclusion, enhancing physiotherapy utilization among persons with physical disabilities requires comprehensive interventions that integrate clinical care with community awareness, cultural sensitivity, and supportive health system structures.

5.3 Recommendations

Based on the findings and conclusions of the study, the following recommendations are proposed:

5.3.1 for Healthcare Providers

Physiotherapists and other rehabilitation professionals should strengthen patient education by clearly explaining the purpose, benefits, and expected outcomes of physiotherapy treatment. Emphasis should be placed on improving patient-provider communication to enhance trust and encourage adherence. Continuous motivational support and follow-up mechanisms should be implemented to improve behavioral engagement.

5.3.2 for Health Institutions

Health institutions should improve the accessibility and availability of physiotherapy services by expanding service centers and integrating community-based rehabilitation programs. Institutional support mechanisms, such as appointment flexibility and patient counseling services, should be strengthened to address attendance challenges. Interdisciplinary collaboration among healthcare professionals should also be enhanced to promote timely referral and continuity of care.

5.3.3 for Policymakers

Policymakers should prioritize physiotherapy services within disability and rehabilitation policies at regional and national levels. Investment in physiotherapy infrastructure, workforce development, and subsidized rehabilitation services is recommended. Public awareness campaigns addressing stigma and misconceptions about disability and physiotherapy should be incorporated into health promotion strategies.

5.3.4 for Community and Disability Organizations

Community leaders, civil society organizations, and disability associations should actively engage in awareness creation and advocacy activities to promote positive societal attitudes toward physiotherapy. Strengthening family and community support systems is essential to encourage persons with physical disabilities to seek and sustain treatment.

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HARAMAYA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

HARAMAYA UNIVERSITY POSTGRADUATE PROGRAM DIRECTOR TAE DIRECTOR

This questionnaire designed to collect information for the study I am carrying out on the topic: “Attitudes towards Physiotherapy Treatment among Persons with Physical Disabilities in Dire Dawa Administration” which is required to partial fulfill the requirement for Master of Arts Degree in master in social psychology. I am attending in the above- named institution. All the information obtained through this questionnaire will remain confidential and utilized for academic consumption only. Besides, your responses will be handled in strictly confidential manner and information obtained from this research will be reported in aggregate.

Please note that:

- ✓ No need of writing your name;
- ✓ Read each statement carefully
- ✓ Please indicate the following by ticking (✓) on the spaces in front of the response Options:

Part I - Demographic Questionnaire

1. *Gender*
 - A. Female
 - B. Male
2. *Age*
 - A. <35 years
 - B. 35-45 years
 - C. 46-56 years
 - D. >56 years
3. *Please indicate your highest level of education*
 - A. First degree
 - B. Second degree
 - C. PhD
 - D. Other _____
4. *What is your marital status*
 - A. Single
 - B. Married
 - C. Divorced
 - D. Widowed

PART II;-

Cognitive dimension

Key for Scales: - 1 = strongly disagree; 2 = Disagree, 3 = moderately agree 4 = agree
5 = strongly agree

No	Questions /Descriptive Statements	Rating scale				
	Items related to cognitive dimension	1	2	3	4	5
1	I believe that physiotherapy can significantly improve my physical health.					
2	I think physiotherapy is a valuable treatment option for my condition.					
3	I trust that physiotherapists have the necessary skills to provide effective treatment.					
4	I feel confident that physiotherapy will help me regain mobility and function.					

Affective Dimension

No	Questions /Descriptive Statements	Rating scale				
	Items related to Affective Dimension	1	2	3	4	5
1	I feel hopeful about the outcomes of my physiotherapy treatment.					
2	I am confident that physiotherapy will make a positive difference in my life.					
3	I feel motivated to attend my physiotherapy sessions regularly.					
4	I enjoy the interactions I have with my physiotherapist.					
5	I feel relieved when I think about receiving physiotherapy treatment.					

Behavioral Dimension

No	Questions /Descriptive Statements	Rating scale				
	Items related to Behavioral Dimension	1	2	3	4	5
1	I regularly attend my physiotherapy sessions as scheduled.					
2	I actively participate in my physiotherapy exercises at home.					
3	I follow the advice and recommendations given by my physiotherapist.					
4	I seek additional information about physiotherapy to enhance my understanding.					
5	I make adjustments to my daily activities based on my physiotherapy treatment plan					

Demographic Dimension

No	Questions /Descriptive Statements	Rating scale				
	Items related to Demographic Dimension	1	2	3	4	5
1	Cultural beliefs in my community affect my willingness to use physiotherapy services.					
2	Some people in my community believe that disability should be treated through traditional or spiritual methods rather than physiotherapy.					
3	Societal attitudes toward disability influence my decision to seek physiotherapy services.					
4	I feel supported by my community in accessing physiotherapy services.					
5	Negative societal perceptions can discourage people with disabilities from using physiotherapy.					

Attitude towards physiotherapy treatment

N o	Questions /Descriptive Statements	Rating scale				
		1	2	3	4	5
	Items related to physiotherapy treatment					
1	Physiotherapy is seen as an essential part of my recovery process.					
2	I believe that physiotherapy can significantly improve my quality of life.					
3	Physiotherapy sessions are viewed as a worthwhile investment in my health.					
4	I feel optimistic about the benefits of attending physiotherapy.					
5	I am generally positive about the effectiveness of physiotherapy for my condition.					
6	I trust physiotherapists to provide the best treatment options for my needs.					

PART IV

Interview Questions

1. How did you first hear about physiotherapy services? (For example: health professionals, media, friends, family)
2. In your opinion, what is the main purpose of physiotherapy for people with physical disabilities?
3. How do you feel about physiotherapy treatment? Please explain whether your feelings are positive, negative, or mixed.
4. Have you ever used physiotherapy services? If yes, how would you describe your experience? If no, why not?
5. What benefits, if any, do you believe physiotherapy can provide for people with physical disabilities?
6. Do you think factors such as your age, gender, education level, income, or type of disability affect your attitude toward physiotherapy? How?

7. Are there any cultural beliefs or societal attitudes in your community that influence how people view physiotherapy treatment?
8. What challenges or difficulties prevent you or others from accessing or using physiotherapy services in Dire Dawa?
9. What factors would encourage you and others with physical disabilities to use physiotherapy services more often?