

1995

The Tripartite Model of Rehabilitation Intervention: Basics, Goals and Rehabilitation Strategies

Hanoch Livneh
Portland State University

Let us know how access to this document benefits you.

Follow this and additional works at: https://pdxscholar.library.pdx.edu/coun_fac

 Part of the [Counseling Psychology Commons](#), and the [Health Psychology Commons](#)

Citation Details

Livneh, H. (1995). The Tripartite Model of Rehabilitation Intervention: Basics, Goals and Rehabilitation Strategies. *Journal of Applied Rehabilitation Counseling*, 26(1), 25-29.

This Article is brought to you for free and open access. It has been accepted for inclusion in Counselor Education Faculty Publications and Presentations by an authorized administrator of PDXScholar. For more information, please contact pdxscholar@pdx.edu.

The Tripartite Model of Rehabilitation Intervention: Basics, Goals and Rehabilitation Strategies

Hanoch Livneh

This paper discusses the tripartite model of rehabilitation as embedded within the broader model of therapeutic interventions. Rehabilitation, or tertiary intervention, can be viewed as addressing specific goals as they relate to diverse functional limitations. The three phases, or components, of rehabilitation intervention discussed include: (a) disability minimization in an effort to reduce its impact upon life activities; (b) skill development, as an attempt to compensate for limitations imposed by permanent losses; and (c) environmental manipulation to promote physical and social-attitudinal accessibility. The paper concludes with discussion of the model's applicability to the field of rehabilitation counseling.

Since it was first introduced, the conceptual model that distinguishes among three phases of prevention (at times referred to as intervention levels) has become increasingly popular in the fields of medicine and mental health (Caplan, 1964; Cowen, 1973; Goodyear, 1976). More recently, Wright (1980) and Hershenson (1990) have attempted to explore the relationship of this model to rehabilitation counseling. Their laudable efforts, unfortunately, have largely gone unnoticed. The intent of the present paper is twofold. First, to briefly outline the central ingredients of the tripartite intervention model, and second, to suggest the applicability of the model to rehabilitation counseling, with particular emphasis on its functional analysis and rehabilitation intervention components.

The Tripartite Model of Therapeutic Interventions

Interventions in the fields of medicine, public health, and mental health may be conveniently divided into three primary domains. These three domains may also be conceptually arranged along a phase-like, albeit somewhat overlapping, temporal ordering. The first level of intervention, or phase, of this model is termed **primary intervention** or **prevention**. It is targeted toward the general population

(i.e., the community at large) and is geared toward reducing, or ideally preventing, the occurrences of physical and/or mental diseases and disorders. Alternatively, it may be viewed as directed at promoting physical health and psychosocial wellbeing (Cowen, 1973; Goodyear, 1976). Primary intervention may be further subdivided into two subcategories, namely, actively altering personal and impersonal environments and settings, and teaching skills to improve quality of life (Goodyear, 1976).

The second level of intervention, suggested by the model, is termed **secondary intervention**, **crisis intervention**, or **merely intervention**. Intervention during this phase typically takes the form of directly treating non-severe, non-chronic disorders and normal life crises. A related goal is forestalling any potential future medical and psychological (e.g., personal and interpersonal) complications. In contrast to primary intervention, where focus was placed on the community at large, the target here is the individual. This level of intervention can also be further subdivided into two distinct components. The first (developmental focus) is geared toward children and seeks to alleviate, and if possible hinder, incipient problems that might result in faulty development. The second (early detection focus) seeks to detect acute signs of medical or mental malfunctioning, followed by immediate intervention to reverse the pathological manifestations of the disorder (Cowan, 1973; Goodyear, 1976).

The third and final level of the model is termed **tertiary intervention**, or **postvention**. During this intervention phase efforts are directed toward minimizing the residual impact of a severe and chronic disabling condition. Obviously, this type of intervention parallels, both in its conceptualization and service provision, the domain of **rehabilitation** (medical, psychosocial, and vocational). The focus, therefore, is on the provision of supportive services to people with disabilities and the promotion of life coping skills.

Before proceeding to discuss, in greater detail, the application of the final phase to rehabilitation counseling, two related concepts, namely, **disability-triggered functional limitations** and **rehabilitation goals**, must first be reviewed.

Rehabilitation Goals and Functional Limitations

Rehabilitation Goals

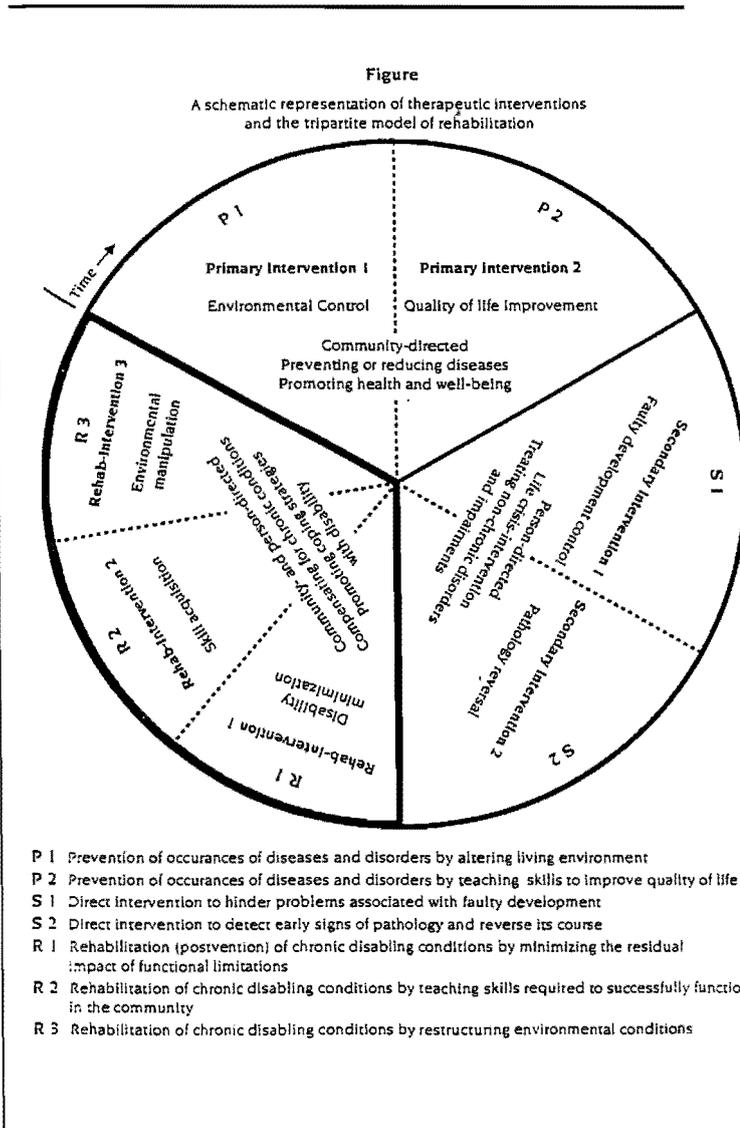
The overriding goals of rehabilitation (or tertiary intervention) may be summarized as follows (see also, Hershen-son, et.al., 1981; Trieschmann, 1974; Wright, 1980):

1. Reducing the cause and/or impact of disability on one's life by restoring functional capacity. This goal of disability minimization is typically practiced in the field of physical or medical rehabilitation (e.g., use of technological assistive devices to improve sensory and perceptual functioning; application of corrective surgical procedures; use of orthotic and prosthetic devices to improve mobility; physical and postural training to strengthen muscles and limbs). Professions involved in pursuing this goal include psychiatry, physical therapy, occupational therapy, ophthalmology, otolaryngology, and speech and hearing therapy. This goal bears certain similarity to Wright's (1980) second-level preventive rehabilitation (i.e., prevention of functional limitations resulting from disability). It is also in line with Wolfensberger's (1976) more philosophical category of response to deviancy--reversal of deviancy by restoration of capacity.

2. Compensating for disability by enhancing other, non-affected, characteristic(s) of the person. The goal of skill acquisition is often attributed to the domains of psychosocial and vocational rehabilitation and involve educational, career and personal adjustment intervention strategies. Professionals involved in providing these type of services include rehabilitation counselors, rehabilitation psychologists, special educators, social workers, and recreational therapists. This phase parallels to Wolfensberger's (1976) reversal of deviancy by rehabilitation or education.

3. Modifying environmental conditions in order to negate the impact of disability. These efforts are aimed at both the physical and social-attitudinal environments and are considered to be part and parcel of both the vocational rehabilitation and independent living movements. This goal shares with Wright's (1980) third-level preventive rehabilitation, the notion of preventing chronic conditions (i.e., irreversible functional limitations) from resulting in a handicap (i.e., affecting one's environmental, vocational, recreational, and/or social functioning). Although not directly comparable to Wolfensberger's (1976) category of reversal of deviancy by reintegration through adaptive dispersal, it certainly shares with it the common cord of community reintegration through removal of environmental barriers.

The above three goals may also be placed along a temporal continuum (See Figure), albeit with certain and necessary degree of overlap, such that: minimize disability (if only partially successful) => instill skills (if performance still hampered by environmental conditions) => modify environment. These three goals may also be regarded as progressing in a circular manner, beginning from a more passive (or externally-controlled) focus (e.g., being operated upon, being fitted for prosthesis, being trained for a use of a wheelchair) to a more active (or internally-controlled) focus



(e.g., acquiring skills to negotiate life necessities), and concluding again, with an externally-oriented focus of altering the environment to the needs of the individual with disability.

Functional Limitations

Rehabilitation goals and objectives might be better understood, and obviously become more specific and behaviorally targeted, in the context of resultant functional limitations. The process of assessing functional limitations seeks to bridge the gap between the symptomatic description of medical (including psychiatric) diagnoses and their resultant behavioral or performance-based deficiencies. As such, the assessment of functional limitations (or alternatively, remaining capacities) provides the rehabilitation practitioner with a useful tool to (a) study behavioral assets and deficits, (b) develop rehabilitation plans, and (c) implement rehabilitation intervention strategies (Granger, 1984; Marsh, Konar, Langton & LaRue, 1980; Tenth Institute on Rehabilitation Issues, 1983). Several systems have been

proposed in an effort to classify functional domains (e.g., Brown, Gordon & Diller, 1983; Crewe & Athelstan, 1981; Marsh, et al., 1980; Sarno, Sarno & Lévitá, 1973; Wood & Badley, 1981; Wright, 1980). The most often suggested functional domains include: (a) mobility (limited locomotion or ambulation); (b) sensory (limited ability to process stimuli through the sense organs or the Central Nervous System); (c) communication (limited ability to generate, relay, and/or exchange information with others); (d) manipulation (limited ability to use arms or hands for object manipulation); (e) pain (limited ability to cope with body-generated noxious stimuli); (f) fatigue (limited ability to expend energy without tiring easily); (g) cognitive (limited ability to perform mental tasks and operations); and (h) social (limited ability to form and maintain meaningful and mutually-satisfying interpersonal relationships).

Assessing functional limitations along these domains provides the rehabilitation professional with a transcontextual perspective on the nature and scope of these limitations (i.e., each functional limitation may be further anchored in specific life spheres such as physical environment, community, work, etc.). Furthermore, it also offers the rehabilitation practitioner an objective, observable, accountable, and comprehensive system for client assessment (see also Crewe & Athelstan, 1981; Granger, 1984; Livneh, 1992).

The remainder of this paper, accordingly, seeks to describe the applicability of the three levels (or overriding goals) of tertiary intervention (i.e., disability minimization, skill development, and environmental manipulation) to rehabilitation counseling, using the concepts of functional limitations and its related classification system.

The Three Levels of Rehabilitation Interventions

Level 1 Interventions

At the first level of intervention, rehabilitation efforts are directly focused on minimizing the residual impact of those disability-generated functional limitations on the individual's life activities. For example, where mobility limitations are noted, as is typically the case with persons who sustained spinal cord injuries, lower extremity amputations, certain arthritic conditions and severe or progressive neuromuscular disorders (e.g., cerebral palsy, muscular dystrophy, multiple sclerosis), level 1 interventions target those affected functions and seek to directly compensate for the losses incurred. Accordingly, the primary rehabilitation modalities adopted are physical-medical in nature and include the use of compensatory mobility devices such as wheelchairs, braces, prosthetic devices and the like. When the primary goal of rehabilitation is to minimize sensory limitations, level 1 interventions modalities are comprised of fitting the individual with visual or auditory aids, to reduce the impact of these sensory losses. In the case of functional limitations associated with pain, level 1 interventions center on medi-

cation (i.e., analgesics) and nerve stimulations (i.e., applying the TENS Unit) to control pain.

When fatigue is encountered, medication (i.e., stimulants) and certain diets, nutrition programs and physical exercise to increase energy and build stamina are considered. Finally, where cognitive or social limitations are noted, level 1 rehabilitation interventions are not, as of yet, clearly defined. Although cognitive retaining programs for individuals who sustained traumatic brain injuries, theoretically, fall within level 1-type interventions, their impact on overall intellectual functioning is, at the present time, not well understood. Similarly, social (re)training programs appear to belong more appropriately with level 2 (i.e., skill-building) interventions.

Level 2 Interventions

At the next level of rehabilitation interventions, rehabilitation modalities are focused indirectly on the affected function(s), by seeking to compensating for or circumvent the permanent loss. This is typically accomplished by teaching the individual those skills necessary to successfully function in his or her community and work setting. Included are a variety of training methods (e.g., educational, vocational, behavioral, psychosocial) whereby non-affected functions and previously acquired skills are further developed and maintained. Several methods illustrate this level of rehabilitation intervention. Among mobility-impaired individuals, any skill training program focusing on the use of manual, communicative, interpersonal, data analytic or other cognitive skills, typify this level of intervention. Individuals with sensory limitations can be trained to acquire similar skills, again, with an emphasis on daily activities and work tasks that do not require vision or hearing (although focusing on the latter functions can obviously be approached via level 1, or level 3, rehabilitation interventions). Functional limitations due to chronic pain might be addressed via a wide range of counseling interventions (e.g., cognitive, behavioral, psychodynamic), in which the overriding aim is to divert, minimize or neutralize the impact of pain on leisure- or work-related activities. When coping with cognitive limitations is the primary focus of rehabilitation, skill training programs seek to minimize the effect of these limitations on one's life by providing services to improve other non-affected areas. These include physical (e.g., fine and gross finger-hand manipulation, eye-hand-foot coordination) skills, interpersonal skills, and in general proficiency in areas not requiring complex intellectual operations. Jobs that require refined mental tasks (i.e., those that necessitate the use of judgement, problem solving, decision making, time or money management skills) are typically avoided. Likewise, in the event that social limitations are dominant, nonaffected functions (e.g., physical, manipulative, cognitive) are targeted for further training, and jobs that require continuous or stressful interpersonal communication or exposure to the public are avoided. Again, in the latter two instances, level 1 and in particular level 3 rehabilitation interventions (i.e.,

direct cognitive skills training and environmental restructuring), may augment level 2 approaches. In most cases, counseling for personal, social, or vocational adjustment becomes a core component of these interventions. Included here are skill training methods for (a) stigma reduction, (b) improved self-concept and self-efficacy, (c) assertiveness, (d) job interviewing, (e) job placement, and other methods to help the client cope with attitudinal and interpersonal barriers encountered on the job and in the community.

Level 3 Interventions

At the third and final rehabilitation intervention level, rehabilitation modalities are geared toward environmental manipulation and restructuring. The underlying assumption of level 3 interventions is that by altering the physical and/or social environments (e.g., simplifying or reducing the requirements inherent in them), the performance of the rehabilitation client will invariably improve. To achieve this aim, architectural, situational, and attitudinal barriers are directly confronted. For instance, architectural barriers that prevent a person with mobility limitations from functioning at a worksite or participating in a community-based recreational activity, can be circumvented through the building of ramps, installing of elevators, and employing other procedures to increase physical accessibility to, and within, the site.

When sensory limitations are encountered, level 3 rehabilitation interventions assume the form of environmental modification to provide for better illumination, magnifying equipment, large print, reading machines, and the like (for visual impairments) and for better acoustics, on-site interpreters, TDD machines, and so on (for hearing impairments). In the same vein, pain-triggered limitations require changes to allow for greater flexibility in body posture. In work-related situations this entails allowance for frequent and need-based alterations among sitting, standing and walking. Periodic resting (i.e., lying down) and allowances for longer and more frequent breaks may also have to be considered. Similarly, fatigue-causing limitations are encountered by providing the individual with the opportunity to have longer and more frequent rest periods, sedentary job activities, less exertional work tasks, or part-time work.

When cognitive limitations exist, level 3 rehabilitation interventions seek to break down activities (e.g., job tasks) into smaller, more manageable units, provide more extensive and detailed instructions and offer close and personal supervision (e.g., supported employment). Finally, when social limitations require intervention, vocational approaches center on choosing jobs where social interaction is minimal (e.g., jobs of primarily solitary activities or minimal contact with the public and co-workers). Relatedly, social-attitudinal interventions may be directed toward training co-workers and supervisors to better understand and appreciate the nature of the imposed interpersonal limitations (e.g., rewarding successful work activities and attempts at communication, withholding criticism).

Implications to Rehabilitation Counseling

The tripartite rehabilitation model outlined in this paper has several conceptual and practical advantages when applied to the field of rehabilitation counseling. First, the model requires that the rehabilitation practitioner applies specific methods of functional analysis to clients. One of the main strengths of the traditional rehabilitation (i.e., psychosocial) model is in its focus on behavioral analysis (i.e., residual limitations and capacities) of medically disabling conditions. The present model further refines rehabilitation diagnosis by classifying functional limitations according to previously suggested systems (Livneh, 1992; Marsh, et al. 1980; Wood & Badley, 1981; Wright, 1980). Second, the present model is capable of providing the rehabilitation practitioner with a comprehensive system of setting rehabilitation goals for each individual client. Goals can be visualized along a temporal dimension such as: minimize disability impact (or apply medically corrective procedures, level 1) -- > compensate for disability (Or enhance other skills -- cognitive, interpersonal, vocational, etc.; level 2) -- > modify environmental conditions (or restructure physical environment and/or reduce attitudinal barriers; level 3). Specific and individually-tailored objectives for each level can, then, be explored and delineated.

Third, the present model can provide a preliminary basis for the application of rehabilitation interventions to clients with a wide range of disabling conditions. Congruent with previous models (e.g., Anthony, 1980; Coulton, 1981; Crewe, 1980; Scofield, Pape, McCracken, & Maki, 1980; Sigelman, Vengroff, & Spanhel, 1979) in which rehabilitation intervention strategies were conceptualized and classified according to context (e.g., community vs. labor force), adjustment domain (e.g., physical vs. psychosocial), or target of intervention (e.g., person-aimed vs. environment-aimed), the present model affords the rehabilitation practitioner with similar tools, for systematically approaching the delivery of rehabilitation services. Planning of service delivery may be conceived along (a) the specific functional domain implicated (as a further refinement of the adjustment domain) and (b) target of intervention (person = rehabilitation intervention, levels 1 and 2 and environment = rehabilitation intervention, level 3). Finally, the proposed model could be used by rehabilitation practitioners to set the stage for service outcome evaluation. When nested within paradigms such as Bolton's (1979), Gelso's (1979), or Lambert's (1983), the tripartite rehabilitation model can offer a more rehabilitation-oriented perspective on (a) the functional domains assessed, (b) the outcome dimensions (e.g., short-term vs. long-term; internal vs. external; single vs. multiple), and (c) the sources of outcome measure (e.g., self-report, professional rating, status measures). The use of the tripartite rehabilitation model, as outlined here, obviously requires further conceptual and clinical elaboration. Additionally, its usefulness and applicability to various rehabilitation settings can only be supported following more

extensive empirical studies of its validity, comprehensiveness, and practicality.

References

- Anthony, W. A. (1980). A rehabilitation model for rehabilitating the psychiatrically disabled. *Rehabilitation Counseling Bulletin*, 24(1), 6-21.
- Bolton, B. (1979). *Rehabilitation counseling research*. Baltimore, MD: University Park Press.
- Brown, M., Gordon, W. A., & Diller, L. (1983). Functional assessment and outcome measurement: An integrative review. In E. L. Pan, T. E. Backer, & C. L. Vash (Eds.), *Annual review of rehabilitation* (Vol 3, pp. 93-120). New York: Springer.
- Caplan, G. (1964). *Principles of preventive psychiatry*. New York: Basic Books.
- Coulton, C. J. (1981). Person--environment fit as the focus in health care. *Social Work*, 26, 26-35.
- Cowen, E. L. (1973). Social and community interventions. *Annual Review of Psychology*, 24, 423-472.
- Crewe, N. M. (1980). Quality of life: The ultimate goal in rehabilitation. *Minnesota Medicine*, 62, 586-589.
- Crewe N. M., & Athelstan, G. T. (1981). Functional assessment in vocational rehabilitation: A systematic approach to diagnosis and goal setting. *Archives of Physical Medicine and Rehabilitation*, 62, 299-305.
- Gelso, C. J. (1979). Research in counseling: Methodological and professional issues. *The Counseling Psychologist*, 8(3), 7-35.
- Goodyear, R. L. (1976). Counselors as community psychologists. *Personnel and Guidance Journal*, 54, 512-516.
- Granger, C. V. (1984). A conceptual model for functional assessment. In C. V. Granger & G. E. Gresham (Eds.), *Functional assessment in rehabilitation medicine*
- Hershenson, D. B. (1990). A theoretical model for rehabilitation counseling. *Rehabilitation Counseling Bulletin*, 33(4), 268-278.
- Hershenson, D. B., et. el. (1981). Toward a theory of rehabilitation counseling. *Journal of Applied Rehabilitation Counseling*, 12(1), 23-26.
- Lambert, M. J. (1983). Introduction to assessment of psychotherapy outcome: Historical perspective and current issues. In M. J. Lambert, E. R. Christensen, & S. S. DeJulio (Eds.), *The assessment of psychotherapy outcome* (pp. 3-32). New York: Wiley.
- Livneh, H. (1992). A preliminary model for classifying functional limitations. *Rehabilitation Education*, 6, 319-334.
- Marsh, S. K., Konar, V., Langton, M. S., & LaRue, A. J. (1980). The functional assessment profile: A rehabilitation model. *Journal of Applied Rehabilitation Counseling*, 11(3), 140-144.
- Sarno, J. E., Sarno, M. T., & Levita, E. (1973). A functional life scale. *Archives of Physical Medicine and Rehabilitation*, 54, 214-220.
- Scofield, M. E., Pape, D. A., McCracken, N., & Maki, D. R. (1980). An ecological model for promoting acceptance of disability. *Journal of Applied Rehabilitation Counseling*, 11(4), 183-187.
- Sigelman, C. K., Vengroff, L. P., & Spanhel, C. L. (1979). Disability and the concept of life functions. *Rehabilitation Counseling Bulletin*, 22, 103-113.
- Tenth Institute on Rehabilitation Issues (1983). *Functional assessment*. Dunbar, WV: West Virginia Research and Training Center.
- Trieschmann, R. B. (1974). Coping with disability: A sliding scale of goals. *Archives of Physical Medicine and Rehabilitation*, 55, 556-560.
- Wolfensberger, W. (1976). The normalization principle. In S. A. Grand (Ed.), *Severe disability and rehabilitation counseling training*. Washington, DC: Rehabilitation Services Administration, Department of Health, Education and Welfare.
- Wood, P. H. N., & Badley, E. M. (1981). People with disabilities. *Monographs of the World Rehabilitation Fund*, 12.
- Wright, G. N. (1980). *Total rehabilitation*. Boston: Little, Brown.

Hanoch Livneh, Department of Special Education and Counselor Education, Portland State University, Portland, OR.