STANISŁAWA BYRA

Istota i funkcje radzenia sobie osób po amputacji kończyny dolnej

The nature and functions of coping abilities in persons after lower extremity amputation

Streszczenie

Artykuł zawiera przegląd dotychczasowej literatury odnoszącej się do procesu radzenia sobie z ograniczeniami wywołanymi stratą kończyny dolnej. Amputacja kończyny dolnej traktowana jest jako strata, której towarzyszy poczucie krzywdy, niesprawiedliwości, ukarania przez los, ujmowana jest także w kategorii zagrożenia lub wyzwania. Eksploracje empiryczne potwierdzają założenia teoretyczne wskazujące na ścisłą zależność między poznawczą oceną amputacji i ograniczeń z nią związanych a przyjmowanym charakterem aktywności zaradczej. Dowodzą dynamiki procesu radzenia, uzależnionej od wielu zmiennych natury psychospołecznej i fizycznej. Osoby po amputacji przystosowując się do życia wykorzystują strategie radzenia, zarówno adaptacyjne, jak i nieadaptacyjne. Czynnikiem, który w znaczącej mierze determinuje ich wybór, częstotliwość stosowania oraz osiągane efekty jest czas, jaki upłynął od zabiegu chirurgicznego. Szczególną płaszczyzną, w obrębie której kształtuje się specyfika aktywności zaradczej wśród tych osób jest radzenie sobie z bólem fantomowym. Całość procesu radzenia sobie z sytuacjami trudnymi związanymi ze stratą kończyny dolnej analizowana jest w kontekście doświadczanych przez jednostkę rezultatów przystosowawczych. W artykule zawarto ustalone przez badaczy prawidłowości w tym zakresie. Opracowanie uwzględnia wyjaśnienia dotyczące tego procesu usytuowane zarówno w podejściu tradycyjnym (transakcyjnej teorii stresu i radzenia), jak i współczesnym obejmującym wskaźniki wzrostu i korzyści dostrzeganych po doznaniu straty kończyny dolnej.

Abstract

The article contains an overview of the specialist literature to date related to the process of coping with limitations resulting from the loss of a lower limb. The amputation of a lower limb is regarded as a loss: it is accompanied by the feeling of harm, injustice, punishment by fate, but is also perceived in terms of danger or a challenge. Empirical explorations confirm theoretical assumptions, which show a clear correlation between the cognitive evaluation of amputation and the limitations connected with it and the nature of an adopted remedial action. They provide evidence for the dynamics of the coping process, which depends on numerous psychosocial and physical variables. While adapting to life, persons after amputation use both adaptation and non-adaptation strategies. The factor that largely determines their choice of strategy, the frequency of its application and the results obtained, is the time which has elapsed since the operation. A significant plane for the development of the specificity of remedial activities among this group is constituted by coping with phantom pain. The whole process of coping with difficult situations connected with the loss of a lower limb is analyzed in the context of individually experienced adaptation results. The article presents the researchers' findings concerning the regularities in this regard. The overview contains explanations of the process, which can be found both in the traditional approach (the transactional theory of stress and coping) and the modern approach relying on the indicators of growth and benefit reported after the loss of a lower limb.

Słowa kluczowe: radzenie sobie, amputacja, ból fantomowy. **Keywords:** coping, amputation, phantom pain.

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INTRODUCTION

Irrespective of the cause, lower extremity amputation brings multi-dimensional psychosocial effects. Surgical intervention consequences are of predominantly negative nature, which is reflected in considerable adaptive problems that in some individuals are maintained for a longer period (and quite often, permanently instilled in a daily life of an individual). Therefore, extremity amputation is perceived as a critical event evoking stress of considerable intensity that requires launching of proper coping techniques, many a time different from those used previously in handling problems. Physical difficulties emerging from the amputation (e.g. using a prosthesis or moving without it), as well as psychosocial problems (the need of assimilating and accepting the loss, restoring one's self-image, gaining comfort in social relations), provoke individuals to undertake specific activities aimed at regaining their lost bio-psychosocial balance. Approaching amputation as a critical event, assumes a broad perspective of more or less radical changes within which a specific spectrum of problems or impediments is accumulated, to which a given individual reacts in an idiosyncratic manner. The nature of reactions displayed by an individual and activated coping mechanisms, is to a large extent determined by the quality of the individual's current and future functioning, which may include both undesirable and developmental aspects [1]. An extensive spectrum of impediments experienced by an individual with an amputation and, at least in the initial post-surgical period, lack of adequate coping abilities, is presumed to lead to a considerable growth of psychopathological reactions. This has been confirmed by empirical analyses pointing to intensified depression or anxiety symptoms as well as post traumatic stress disorder indicators [2-5]. Extremity amputation is also treated as a grievous loss, accompanied by the feeling of harm, injustice, punishment by fate, etc. According to Hobfoll's conservation of resources theory, amputation may involve an objective loss of material resources of an individual, especially in the field of fitness and independence, at the same time triggering the so-called loss spiral [6]. Along with the loss of physical fitness and lowered physical endurance, a person may experience further losses, e.g. loss of employment, and consequently – of financial resources etc. What is more, an individual evaluates the experienced loss spiral in a subjective manner, experiencing significant losses in the psychosocial dimension, e.g. by losing their previous joy and life satisfaction, lowering of their self-esteem, losing their social role of a healthy and able person, to assume the role of a disabled person.

The analysis of amputation as an experience triggering the loss spiral is related with its recognition as a peculiar type of threat or challenge. By observing a number of objective losses and evaluating them in a subjective manner, an individual formulates specific beliefs regarding his/her own functioning. Assessing amputation as a threat is based on the beliefs about one's inability to cope with experienced encumbrances and fears about the future. Limb loss may jeopardize values appreciated by the individual and/or their possible realization (e.g. health, fitness, self-assessment, self-esteem, social role, relations with other people, perception by other people). On the other hand, assessing amputation as a challenge, involves stimulation of an individual and his/her beliefs about having resources conducive to overcoming the encountered limitations. The person knows that he/she is personally responsible for effective solving of problems emerging as a result of extremity loss. Regarding amputation as just another life challenge requiring effective coping, stimulates an individual to select proper coping strategies, modify those used previously, make plans for the future etc. [7].

Therefore, cognitive assessment of an amputation by the individual is of key importance for determining the nature of coping activities he/she undertakes. For it is not the very fact of acquiring a disability as a result of amputation, but its perception, the process of evaluating the suffered loss as an impact on self-perception and further functioning, that determine coping and adaptive processes to the largest extent [8]. In this place it should be noted, that the primary function of cognitive assessment referring to the amputation, determining the nature of applied coping strategies, is influenced by various factors the significance of which increases along with time elapsing from the performed surgical procedure. For example, personality traits reflected in optimistic disposition, higher level of perceived control over the disability, sustained self-esteem, appear to treat amputation and related encumbrances as possible to overcome, also being guided by the belief that gaining necessary resources despite the acquired limitations is actually possible [9].

The process of coping in persons with an amputation, involves a broad range of encumbrances, difficulties or impediments of purely physical or psychosocial nature, directly or indirectly related with the loss of an extremity. This is a dynamic process with fundamentally different individual stages of adapting to living with a disability. Coping strategies adopted in the period immediately following the procedure, are subject to specific modifications at consecutive adaptive stages. Changes in coping techniques appear to be justified, considering transformations in adaptive requirements an individual has to face when trying to function with the experienced encumbrances as smoothly as possible. Coping strategies demanded at one time and leading to favourable results, may be used less frequently and bring ambivalent or adverse effects at another stage of adaptation [10]. An example of a coping strategy bringing contrary results, depending on the moment at which it is used, is denial. Immediately after the surgical procedure, denial may play a positive role, protecting the patient against rapid lowering of their self-esteem, questioning the meaning of life etc. However, as the use of this strategy is prolonged in time, this may lead to the person's withdrawal from more active methods of coping with the hardships [4].

Time perspective also proves to be a significant factor while determining the nature of effects brought about by the use of a coping strategy manifested in catastrophizing. It is based on the lack of self-confidence and a conviction about not being able to control the experienced difficult situations [11], and may be manifested via rumination, magnification of experienced hardships accompanied by the feeling of helplessness, impotency [12]. Due to its specific nature, catastrophizing is regarded as a maladaptive coping strategy bringing adverse results in physical and psychosocial functioning of an individual, acting as the major predictor of intensified pain, symptoms of depression and anxiety [13],

higher subjective disability, excessive focus on the problems, lowering of mobility and readiness to undertake independent activities in various spheres of life [14]. However, in the initial period of adapting to life immediately after amputation, the strategy manifested in catastrophizing is adopted relatively often. At that time, it is instilled in the natural process of grieving after loss of an extremity. The patients usually display intense catastrophizing, which is linked however to lower levels of depressive symptoms. Adopting an excessively negative and unrealistic interpretation of one's personal situation, a tendency to magnify the experienced limitations, presenting future as dominated by insurmountable obstacles may, during initial confrontation with the altered body image, act as a buffer, just like denial, protecting the patient against particularly harmful effects of experienced stress, leading to favourable adaptation in the longer perspective. Positive role of catastrophizing revealed immediately after an amputation, manifested in providing favourable conditions for developing the demanded adaptive effects, is connected with gaining of expected support that mobilises one's adaptive efforts, for instance, related to acceptance of prosthesis. Catastrophizing strategy is treated as a means to acquire resources essential for coping with the experienced difficult situation [15]. At later stages of fighting with the hardships, favourable nature of this dependence is discontinued, and catastrophizing brings adverse effects, increasing the intensity of depression and anxiety [16]. Certain regularity related to dependence between catastrophizing and presence and intensity of depressive symptoms in patients with an amputation, should be emphasized. Adoption of this kind of coping strategy at an early adaptive stage, involves lower intensity of depression, at the same time playing a predictive role related to lowering of depressive symptoms and reduced pain intensity after 6 months of the surgical procedure. Whereas, in persons who began catastrophizing at later stages, this strategy proved to be one of the major predictors of unfavourable adaptive results [17].

Coping strategy in the form of catastrophizing leads to equivocal consequences (referring especially to the emotional state of an individual) observed not only in adaptive periods. It brings contrary effects, depending on the type of impediments an individual struggles with. A very specific phenomenon occurring in persons with an amputation, which is closely interrelated with catastrophizing, are phantom pain sensations felt in the removed part of the limb, which fails to involve commonly experienced pain-free sensations within the stump or suffering in the residual limb [18]. It is considered likely that about 85% of persons with an amputation experience phantom pain sensations [19]. Traditional approaches accounting for the origins of phantom pain sensations assumed that they result from certain psychological and personality disorders, whereas contemporary concepts treat them as a natural reaction of the organism to the limb loss, having both physiological and psychological grounds [14,17]. Empirical studies have shown that intensification of the phantom limb pain is a consequence of maladaptive cognitive coping strategies, predominantly catastrophizing. Hill discovered strong connections between more intense catastrophizing and the degree of phantom pain nuisance and psychological distress [20]. An extensive study of 228 patients with an amputation of lower extremity experiencing phantom pain sensations, found that catastrophizing was one of the most significant predictors of pain severity, physical disability and psychosocial dysfunction (respectively 26, 11 and 22% of variance in pain intensity and nuisance) [21]. Also, study results included findings referring to changes in functional properties of catastrophizing referring to the phantom pain, emerging in different periods of adapting to living with an amputation. Catastrophizing characteristic of patients immediately after an amputation was conducive to higher intensity of phantom limb pain and psychological distress, and shaping of a belief that the felt pain constitutes a material obstacle preventing successful adaptation to the acquired limitations. Contrary to the revealed positive consequences of catastrophizing, manifested in less severe symptoms of depression, a negative role of this strategy was found in the context of struggling with phantom limb pain. Catastrophizing manifested immediately after an amputation was a significant predictor of intensity of this type of pain emerging at later stages of adaptation [17].

In coping with the phantom pain, patients use other coping strategies, which present various results. It was proven, that successful adaptation to chronic phantom pain results from application of the following strategies: diverting attention from pain, persuading oneself to positive aspects of the situation, increased involvement in various types of activities [22]. Coping by taking a rest while experiencing phantom pain sensations was regarded as a maladaptive strategy on the other hand, as this may lead to myatrophy and decreased resistance to mobility/physical activity, developing deeper disability in the longer term [23]. It should be noted, that significant grounds for developing and acquiring effective techniques of coping with phantom limb pain are provided by psychological condition of an individual, mainly related to the problem of accepting the limb loss. A study by Pucher, Kickinger and Frischenschlager has shown that persons with an amputation, who were coping with the loss more successfully and who at least partially accepted the altered image of their body, suffered less from phantom pain sensations, at the same time believing that they are able to control situations when the pain becomes more intense [24]. In some persons with an extremity amputation who experience phantom pain sensations, an interesting phenomenon may occur. More or less consciously, they do not attempt to cope effectively with this type of pain. For it turns out, that experiencing more intense phantom pain sensations is conducive to establishing a tendency to believe that they have a complete and undamaged body.

Beside phantom pain sensations, patients with an amputation are challenged by numerous and diversified difficult situations of an objective and subjective nature. They have to cope with objective barriers hindering (and in some cases, preventing) their mobility, as well as with possible complications after surgical procedures, i.e. skin oedema and ulceration, stump swelling, chronic muscle contraction, infections, tissue scarring, stump neuromas causing nagging pain [25]. Major difficult situations additionally involve problems emerging immediately after the procedure, e.g. wound healing, treatment and, at subsequent stages, preparation to wearing a prosthesis, its adjustment and mobility attempts, any impediments related to using the prosthesis, e.g. sweating in the area of prosthetic socket, skin irritation caused by

rubbing, pressure [26]. Emergence of these difficult situations provokes an individual to present certain attitudes, reactions, in order to protect and strengthen their self-esteem, acquire social resources, modify previous and look for new sources of stable and satisfactory image of one self, image of their body. In all these aspects, the individual encounters specific impediments, which strictly depend on the pre-trauma personality structure [9].

In the context of indicated difficulties faced by persons with an amputation, empirical analyses have been made focused on determining characteristic features of coping activities taken and strategies they involve. Review of available literature allows concluding that adaptive coping strategies in persons with an amputation especially include active, task-based handling of problems, accompanied by the feeling of control over the acquired limitations. Livneh, Antonak and Gerhardt found that higher involvement in active problem solving is negatively correlated with internalized anger, but positively correlates with acceptance of disability and general adaptation [27]. Desmond and MacLachlan, when diagnosing problems experienced by the subjects in the last few months and directly related to the amputation, at the same time managed to identify coping strategies used by the patients [3]. Task-based strategies and those manifested in looking for social support, revealing significant and negative correlations with symptoms of depression and anxiety, proved the most desirable. Focus on activation of expected, satisfactory support was additionally positively interrelated with social adjustment. Demanded aspects of the strategy consisting in looking for support and drawing satisfaction from this support, were also confirmed in qualitative analyses conducted by Gallager and MacLachlan [28]. Persons with an amputation, when using this type of strategy realized as meetings and conversations with individuals who also experienced lower extremity amputation, were more motivated to get involved in overcoming the encountered impediments and perceiving the acquired disabilities as a challenge one has to face. What is more, this study found that the adaptive function is played by the coping strategy of acceptance, consisting in regarding amputation as a grievous loss and appreciating one's personal situation as more favourable when compared to other individuals who are unable to move, permanently immobile.

Coping with difficulties by comparing oneself to others who were less lucky, and making the balance to one's benefit, is a strategy relatively often used by patients living with an amputation. It is a specific form of coping focused on emotions, however facilitating application of strategies oriented to problem solving. The use of the so called "underrated comparisons" strategy, that is confronting oneself, one's difficulties with individuals with greater disabilities, limitations, more unhappy, favoured enhancement of self-esteem in persons with a limb loss. However, it should be emphasized that these types of coping activities are demanded only in the short run. Long-term use of favourable results of conducted comparisons proves to be unrealizable when the individual has to face particularly escalated problems, exhausting one's energy resources and revealing objectively existing impediments that are difficult to overcome on one's own [29].

Empirical explorations have also revealed various types of maladaptive strategies applied by persons with a limb loss, generating unfavourable effects in psychosocial functioning, assuming the form of increasing symptoms of depression and anxiety, permanent lowering of self-esteem, feelings of helplessness, injustice, inequitable loss, hostility towards oneself and others etc. experienced on a daily basis [2]. They primarily include emotion-focused coping strategies as well as passive cognitive strategies, i.e. cognitive withdrawal, avoidance and catastrophizing [2,9,27]. Coping manifested by focusing on emotions and cognitive withdrawal, proves to favour the development of depression, external hostility and reduced acceptance of one's disability until its complete absence [27]. In a study by Desmond and MacLachlan, avoiding problems was positively correlated with symptoms of depression, anxiety, obsessive thinking, and negatively correlated with the general adaptation to the amputated limb and limitations related to using the prosthesis and social adaptation [3]. Emotion-based and avoidance coping techniques involve passive handling of encountered problems, which significantly hinders constructive adaptation to living with post-amputation limitations. However, in some situations, they are the only practicable ones. As it is not always essential to get actively involved in solving a problem, especially when at a given moment, there are no conditions conducive to or enabling focusing on the problem, or if there are no available means to resolve it. Temporary passive acceptance of the encountered impediment may prove to be desirable and bring effective results at a psychological level [30].

What should be equally emphasized however, is the fact that prevalence of passive coping techniques, and avoidance-based ones in particular, leads to considerable lowering of adaptive indicators, which is reflected both in everyday functioning and in the rehabilitation process [31]. They are contrasted, considering the nature of their consequences and degree of effectiveness in actual overcoming the impediments, with the clearly task-based strategies requiring motivation and involvement in solving of the encountered problem. Livneh, Antonak and Gerhardt, in the context of the revealed polarity of coping strategies used by persons with an amputation, have shown that they may be depicted by means of at least two dimensions: active, confrontative coping vs. passive avoidance, as well as social and emotion-based coping vs. task-based coping [32].

Documentation of positive functions of task-based coping techniques, problem-solving techniques and maladaptive emotion-based or avoidance coping mechanisms in the study, suggests potential advantages of a therapeutic and rehabilitation intervention. The intervention would be focused on reducing the dependence on clearly avoidance-based strategies, with simultaneous stimulation of coping techniques directed at constructive handling of difficult situations. Therapeutic activities focused on developing the skill of effective problem solving, would lead to establishment of specific personal resources (e.g. feeling of control, self-efficacy) reflexively supporting effective coping activities.

Techniques of coping with difficulties and acquired limitations adopted by persons with an amputation, are analyzed in terms of one of the most significant factors determining the course of the adaptation process. Oaksford, Frude

and Cuddihy when establishing a dependence between coping and adaptation in individuals with a limb loss, suggested to characterize it with reference to the experienced stressors, also considering individual determinants playing a fundamental role in assessment of those stressors and in selection of coping strategies [33]. They developed a model suggesting that techniques of coping with difficulties experienced after a surgical procedure to a significant extent depend not only on objectivity of those difficult situations, but primarily on personality traits that are of crucial importance for establishing preferences regarding specific coping activities. In the traits, they included in particular optimism, approving attitude, presence (or absence) and intensity of fatalistic beliefs, perception of one's personal efficiency and locus of control. The model assumes that general mechanisms of coping (e.g. avoidance, focus on a task, using humour, searching for support) adopted by persons with an amputation, change over time, in line with the transformations that occur in the dynamic process of adaptation. For instance, the researchers have found that as the time after amputation goes by, the frequency of using strategy of humorous approaching the difficulties, with the simultaneous growth in involvement in practical activities, is reduced. Most probably, this is a result of the growing need to focus on more practical problems related with, e.g. the necessity to acquire skills to use the prosthesis or spend energy in a rational manner. When confronting this kind of problems, the use of humour proves to be maladaptive. In addition, they found a dynamics in the process of coping, in relation to the strategy manifested in looking for social support. To the largest extent, this technique was used immediately after surgical procedure, whereas to a considerably lesser extent – at later stages of the adaptation process. Presumably, along with acquisition of more independence in coping with difficulties, patients reduce their involvement in mobilizing assistance of other people.

Based on assumptions adopted in the presented model, it may be concluded that a person with an amputation when struggling with impediments, chooses coping strategies which are most effective from his/her subjective point of view at a given stage of adaptation, and decides to continue or resign from their application when circumstances and their coping effectiveness change. At the same time, we could assume a thesis about developing of certain competencies in coping with specific problems and limitations over time, as a result of multiple checking of effectiveness of the used strategies. Relevance of this thesis is confirmed in reality, which is accounted for by study results suggesting higher and more satisfactory effectiveness of coping in individuals who experienced a lower extremity loss in a distant future [29]. However, it is obvious that not all individuals after long-term training in coping with post-operative difficulties manage to reach satisfactory coping effectiveness results. Individuals undergoing amputation as a necessary procedure saving their health or life threatened by aggravation of a chronic disease, frequently experience the feeling of relief. They use effective coping strategies, e.g. in the form of a task-based focus on their problems, their acceptance, as well as acquisition and effective use of social support. However, previously not experienced grief, a kind of mourning after the lost limb, may emerge at a later time, affecting the adopted coping strategies. At the time of increased negative emotionality, there is a stronger tendency to prefer maladaptive techniques of coping with difficulties [34]. What is more, the process of coping developing in persons with an amputation is affected by various medical, physiological, social and personality-based determinants underlying difficult situations, which is of considerable importance for reaching effectiveness in the undertaken coping activities.

Conducted analyses have increasingly shown focus on coping leading to not only desirable results of the psychosocial functioning, but also more attention has been paid to individuals who, by coping in a given manner, not only successfully adapt to the experienced loss, but also reach results exceeding their previous level of acceptance. Among people affected by significant life changes, including amputation, indicators of achieved benefits are diagnosed, manifested e.g. in the improved self-esteem, higher appreciation of life, establishment of development-oriented system of values, focus on building satisfactory social relations, spiritual development. In this type of a scientific trend, currently popular assumptions of positive psychology are used, which have been increasingly applied in rehabilitation, primarily for explaining the quality of psychosocial functioning of people with disabilities or chronic diseases, and effectiveness of rehabilitation activities. These explanations are based on two basic categories: potential/power of an individual and subjectively evaluated positive/desirable aspects of encountered experience. It is assumed, that experiencing negative events, such as a disease, injury, unexpected and permanent damage, may evoke the need to look for positive aspects, opportunities of development and self-improvement.

Relevance of assumptions of positive psychology is confirmed in empirical explorations conducted among individuals with an amputation, referring to coping mechanisms and adaptive reactions. In a study by Dunn on men with a lower extremity amputation, directed at analyzing favourable consequences of finding positive aspects in experiencing a disability, it was found that a special role in the process of searching for these positive aspects was played by specific personality traits, especially optimism and the feeling of control over the acquired disability [9]. About 77% of subjects pointed to emergence of something positive in their lives after the performed surgical procedure, whereas more than a half of subjects concluded that favourable changes occurring in their lives were rather of secondary importance. For one third of the respondents, positive aspect of an amputation involved appreciating life anew. These analyses have shown as well that finding positive aspects of the experienced situation by individuals who had undergone amputation, was significantly interrelated with lower symptoms of depression. Reaction of an individual manifested in focusing on positive aspects of post-amputation situation and in striving to understand their significance, is an adaptive coping strategy the application of which leads to desirable effects in the process of adapting to life after a limb loss. Results of the study by Rybarczyk et al. allow concluding, that activity of an individual with an amputation resulting in finding any positive elements and at the same time giving the sense of evolutionary personal transformation, belongs

to the most important predictors of desirable adaptive effects [31]. A qualitative study by Gallager and MacLachlan has shown positive approaches to a disability acquired as a result of amputation in nearly half of the subjects who spoke of regained independence and mobility after the use of a prosthesis [28]. Amputation was perceived as a significant factor building one's personality, evoking a positive change in the approach to life, improving coping abilities, elimination of pain, leading a better life than before, using it as a chance to meet new people and establishing satisfactory relationships. Therefore, it may be stressed that a coping strategy of adopting a positive approach to acquired encumbrances and assigning to them positive meanings, provides favourable grounds for selecting and applying other desirable problem-handling techniques, e.g. active involvement in finding a constructive solution. This type of behaviour in case of a limb loss may also be understood as a cognitive coping strategy adopted to protect the threatened positive beliefs about oneself. However, some researchers claim that this behaviour is not so much one of acceptable and desirable coping strategies, as an indicator of genuine positive change in an individual in the course of adapting to living with an amputation [33].

To sum up, the process of coping with difficult situations, impediments, limitations in persons with an amputation, is strictly interrelated with adaptive mechanisms which comprise it. Selection of specific coping techniques is determined by the person's evaluation of the amputation and related difficulties, and the valuing process is determined by a number of personality – and situation-related factors. Although some strategies are regarded as adaptive (e.g. task-based and confrontative techniques, and those directed at looking for satisfactory social support) in persons with a lower extremity loss, clear-cut indication of the most desirable combination thereof turns out to be impossible for a number of reasons. Firstly, the process of coping is of highly idiosyncratic nature; secondly, the use of selected strategies is highly dynamic: coping techniques desirable and bringing adaptive benefits in one period may prove to be maladaptive or even disturbing the optimum psychosocial functioning at other times. Occasional studies in this field do not allow finding, in what particular situations the adopted and successfully used coping strategies undergo the largest transformations. Thirdly, considerable impediments are encountered during determining effectiveness of specific strategies of coping with particular difficult situations a person has to face after an amputation. Future empirical explorations that might allow for at least partial clearing of currently observed obscurities, and for completing the emerging gaps in the full understanding of the process of coping in persons with an amputation at different adaptive stages, would surely favour beneficial practical implications in the form of adequately designed therapeutic and rehabilitation interventions.

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