

Conservation of Resource Theory (COR) in Stress and Trauma: An Overview of Theory, Applications, Limitations and Examples.

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Course outcomes:

Once you have completed this course you will have an understanding of:

- An overview of COR, its fundamentals, categorisation of resources and the principles of resource loss and gain;
- Applications of COR theory to interventions as well as to traumatic stress specifically and the theoretical integration of COR theory;
- Devolving trauma interventions, trauma and resilience, involving non-professionals, and the Williams, Bisson et al., (2011) stepped model of care;
- Hobfoll, Watson, Bell et al., Five Essential Elements of Trauma Intervention;
- The limitations of COR theory.

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CONSERVATION OF RESOURCES THEORY (COR) IN STRESS AND TRAUMA: An Overview of Theory, Applications, Limitations and Examples

1. Conservation of Resources (COR) theory overview

COR theory was developed by Stevan Hobfoll during the 1980's and 90's in reaction to the prevailing assumptions that stress is a problem only in the minds of individuals, and as such an unnecessary, unwanted reaction to the world.

Hobfoll's work represents a radical departure from the view that stress is pathological. It has alerted us to the reality of stressful events and circumstances, and that stress derives, universally, from real loss and threat, or a failure to gain resources (object, condition, personal and energy), after significant resource investment. His theories have moved the concept of stress beyond the purely clinical field, beyond the field of individual pathology. COR provides new insights into stress in individuals as well as groups and communities.

COR enables us to address issues of stress in a pragmatic way, on a much larger scale, in situations where conventional individual-focused interventions are not practical or functional. Practitioners in the field are provided with new tools with which to approach the challenges of large-scale trauma and stress in impoverished communities in Africa and elsewhere. Equally, it provides a refreshing approach to trauma work with individuals and families.

1.1 Fundamentals of COR

- COR theory incorporates the environment into the process of coping with stress.
- Resources are the key components that determine whether an individual perceives an event as stressful or not, therefore resources (or lack thereof) predict how the individual will cope with stress.
- Individuals seek to create circumstances that will aid them in retaining, protecting, and building resources. They seek to create a world that will provide them with pleasure and success.
- Stress is experienced when an individual is confronted with either a threat to, or loss of, valued resources (Hobfoll, 2001).

The theory proposes that resources are the essential component in stress. Psychological stress, as defined by Hobfoll (2001) is a reaction to the environment in which there is:

- (a) actual loss of resources,
- (b) threat of loss of resources, or

(c) when there is no resource gain after the investment of resources.

Individuals strive to minimize loss in order to reduce stress, and strive to develop a surplus of resources to counteract the risk of future loss. The theory also states that when people develop excess resources they are in a much better position to acquire a positive well being (Hobfoll & Schumm, cited in Di Clemente et al., 2002).

1.2 Categories of resources

Resources are defined as anything that is valued by individuals and groups. Importantly, COR theory emphasizes that what people value is either universal or culturally embedded. For example, our health, hope, necessary tools to accomplish our work, food, self-esteem, and stamina, are all universally held as valuable. COR theory identifies four categories of resources that, when lost or gained, will result in either stress or positive well being respectively. Resources can be objects, conditions, personal characteristics, or energies.

1.2.1 Objects are valued for their physical attributes, or for status they represent based on rarity and expense. For example, a BMW not only provides a means of transport, but also indicates status. A simple home is vital because it provides shelter, while a mansion has more status. The physical attributes, as well as the status of objects, contribute to stress resistance (Hobfoll & Schumm, cited in Di Clemente et al., 2002).

1.2.2 Conditions are resources that are sought after and treasured by an individual, for example becoming a wife, being an employee or being part of a family (Hobfoll, 2001). These resources are crucial in understanding an individual's stress resistance abilities. Hobfoll affirms in his study of cancer patients that a simple condition like living with someone, resulted in reduced mortality rates of women with cancer (Hobfoll & Schumm, cited in Di Clemente et al, 2002). COR theory therefore suggests conditions which are valued by individuals can buffer the individual against stress (Hobfoll, 2001).

1.2.3 Personal characteristics can support stress resistance. A personal positive outlook may lead to a sense of well-being. Personal traits such as high self esteem, open mindedness and optimism (Hobfoll, 2001) have been shown to be stress resistant resources. For example, an individual with a positive outlook towards the world is likely to have better coping skills.

It is important to note that self-esteem, as a personal resource, is defined by the social values of the group an individual belongs to, according to COR. Furthermore, social support tends to foster a positive sense of self and an ability to

deal with stressful circumstances (Hobfoll, 2001).

1.2.4 Energies include resources such as time, money and knowledge. These are resources that are not characterized by their essential, stand-alone value, but rather by how these resources can be used to acquire other kinds of resources. For example, having an education or degree is a resource needed to acquire specific types of employment. Time is also considered to be an energy resource, in that it can be utilized to create new resources (Hobfoll, 2001).

1.3 Principles of resource loss and gain

In order to get a broader understanding of COR theory, researchers have proposed a set of principles that define resource gain and resource loss.

1.3.1 The first principle states that resource loss is more powerful than resource gain. This principle has been affirmed in a variety of psychosocial studies. This principle further introduces a concept known as loss spirals, which suggests that those already lacking in resources will be more vulnerable to experience additional losses (Hobfoll & Schumm, cited in Di Clemente et al., 2002). Loss spirals develop when there is a lack of resources with which to counteract further loss of resources (Hobfoll, 2001).

Consequently, it is very evident that resource loss has a greater impact on, and is more prevalent among, individuals, groups and communities that are already lacking in resources. Loss spirals are therefore particularly evident among the poorest, resource-depleted communities and oftentimes in women (Hobfoll & Schumm cited in Di Clemente et al., 2002).

Studies on resource loss cycles have confirmed that people who experienced only limited resource loss were better off than those suffering repeated resource loss (Wells, Hobfoll & Lavin 1999 cited in Hobfoll, 2001). For instance, studies conducted by Lane & Hobfoll, 1993 (cited in Hobfoll, 2001), with patients diagnosed with Chronic Obstructive Pulmonary Disorder (a life threatening condition), found that such patients were subject to a huge amount of resource loss due to long-term medical treatments. As losses increased, they became angrier, and as a result they were isolated from potential support, thus causing an expanding spiral, which put them at risk to additional resource loss (Hobfoll, 2001).

1.3.2 The second principle is that resources have to be invested in order to gain new resources or prevent their loss. Loss of resources is stressful, but one may be able to offset this loss by activating other resources. (Pearlin et al., 1981, cited in Hobfoll, 2001). Replacement of resources is the basic way to counteract the negative impact of lost resources (Hobfoll, 2001). The implication is that those with sufficient resources have more possibilities to replace, and gain, resources, by

utilizing other available resources.

1.3.3 The third principle is that a lack of gain following the investment of resources to counteract a loss, is also stressful. Studies on COR theory also support the assumption that those who lack resources still attempt to employ other resources to off-set the loss, but this often produces self-defeating results. When their last remaining resources are used to try and off-set their loss, and nothing comes of it, it will obviously equate to further stress (Hobfoll & Schumm, cited in Di Clemente et al., 2002).

1.3.4 A further concept of COR is “nestedness”. Hobfoll (2001) speaks of individual-nested in family-nested in tribe. This concept implies that an individual, including individual thoughts and behaviour, does not exist in isolation. An individual’s behaviour, thoughts and responses to situations happen within the context of family and tribe. We are a part of, and a product of, our social context – our family, our broader network of friends, colleagues and our community (tribe). Similarly, the importance that we give to certain resources is a result of nestedness. The importance an individual attaches to a particular resource is a result of how the culture in which the individual exists values that resource. COR attaches great importance to the socio-cultural environment of individuals (Hobfoll, 2001).

An example of how culture and community influence the way in which people perceive and value resources, can be drawn from a case study of Tibetan refugees in 1959. In contrast to most other refugees, their greatest stress was not the persecution they were being subjected to but rather that the Dalai Lama, the Buddhist spiritual and temporal Leader of the Tibetan people, was being persecuted and had been forced to leave Tibet and flee to India. Consequently, 85,000 Tibetans took refuge in Nepal and Bhutan in an attempt to immigrate to India to be closer to their spiritual leader. Tibetan refugees suffered intense persecution and loss of loved ones as they journeyed over the frozen Himalayas. They suffered frostbite, disease, malnutrition and exile in order to be free to live as they always have, but having an integrated community with the Dalai Lama (Terheggen MA, et al, 2001) was their most valued resource.

What people consider a stressor or a resource, and how great they perceive the stressor or resource to be, is a result of culture, learned reactions and learned thought processes (Hobfoll, 2001).

The pragmatic value of COR theory is that it provides an easily understood framework for assessment of stress reactions, and for devising practical interventions, on an individual level, as well as on amore community based level. The next section discusses practical applications.

2. Application of COR Theory

Intervention programs based on COR theory will in essence aim to help individuals and communities to acquire more resources, to regain resources, or to enhance them. With any intervention program based on COR theory it is important to consider the two earlier mentioned fundamental principles of COR namely:

- Resource loss is more powerful than resource gain.
- Resources must be invested in order to gain resources or prevent their loss.

In applying COR theory, professionals can use these principles as a theoretical framework to prevent resource loss, to maintain existing resources, and to increase resource gains.

2.1 Application of COR theory as an intervention

COR theory has been tested and verified in a variety of population studies. These studies show that COR has been validated to be applied in community based intervention programs. Based on these studies Hobfoll concludes that interventions based on COR theory is key to reducing the negative psychological reactions to stress (Hobfoll & Schumm, cited in Di Clemente et al., 2002).

A program of research was reported in a series of publications by Hobfoll and colleagues (Britton, Levine, Jackson, Hobfoll, Shepherd, and Lavin, 1998; Hobfoll 1998b; Hobfoll, Jackson, Lavin, Britton, and Shepherd, 1993 & 1994a, b; Hobfoll, Jackson, Lavin, Johnson, and Schroder, 2002; Levine, Britton, James, Jackson, and Hobfoll, 1993; MacKenzie, Hobfoll, Ennis, Kay, Jackson and Lavin, 1999 cited in Di Clemente et al., 2002). It described COR theory as part of intervention strategies aimed at reducing HIV risk activity. The aim of these publications is to highlight how a resource based approach informs intervention. These interventions were based on the following theoretical foundations:

2.1.1 The general guide in COR is that change is resource-driven, and resources are interrelated (Hobfoll, 1998b). This means that when we want to change specific behavior, we need to provide individuals with the resources to produce that change. If we want sexually risky behavior to change, interventions must focus on helping individuals to acquire resources to aid this. Resources can include teaching women how to be assertive, how to negotiate safe sex options with their partners, or to provide them with free access to condoms.

2.1.2 Empowerment means increasing those resources that are needed for change. In their intervention to reduce the HIV risk behavior amongst inner-city women, Hobfoll and colleagues established that empowerment was essential in order to promote sustainable safer sexual behavior (Hobfoll, 1998b). Based on the

theory of Gender and Power and defining empowerment as an interpersonal concept of relationships, these interventions were created to emphasize ethnic and gender pride, to increase women's sense of empowerment. Interventions aimed at empowering individuals can increase the individual's personal characteristic resources like self-efficacy, as well as their social resources like family support.

2.1.3 Increasing sense of community and attachment helps change social norms. Therefore for women to successfully implement condom use, Hobfoll et al., (2003) encouraged women to utilize support from both their partners and other women in the group. Interventions sought to raise a woman's sense of personal responsibility, but also a responsibility towards their partners, other women in the group, their parents, and their children. Women were encouraged to think about their health and wellbeing and about their children's health. Interventions that aim to train women in skills to convey this perspective to their partners can help change the social norms within a community. Safe sex can become a priority and it can also start to foster community support.

2.1.4 Lastly, multiple sessions provide more opportunity for change. Hobfoll and colleagues established that interventions should be spread over several sessions (Hobfoll, 1998b). More sessions provided more opportunity for the women to increase their sense of community and empowerment and also increasing their resources for change. Although many interventions have multiple sessions, COR emphasizes multiple sessions based on the premise that resource gain is slow and incremental. Thus the aim of more sessions will not be to reach additional goals, but to work on each resource gain more intensively.

2.2 Applications of COR Theory to Traumatic Stress

2.2.1 Research studies on COR theory on post-traumatic stress disorder has found strong support for COR theory in their study of Post-traumatic Stress Disorder (PTSD). Hobfoll and colleagues (2006) studied the impact of resource loss after the September 11th attack in the United States, and the impact of ongoing terrorism in Israel (Hobfoll et al., 2008). Both studies found that psychosocial and material losses had a major influence on PTSD and depression. They established that cognitive losses (hope, self-esteem) and material losses (job, houses) are inextricably linked and that both have an equally powerful effect on individuals. This is important for intervention programs as it points out that:

- Correcting for resource loss and restoring lost resources are practical options for interventions (Hobfoll, Watson, et al., cited in Di Clemente et al., 2002).
- Resource loss is the key variable to predict if an individual or community will

cope or have the motivation to cope with a natural disaster (Freedy et al., 1994 cited in Di Clemente et al., 2002).

- Professionals should focus on minimizing or eliminating resource loss, when possible, to increase people's motivation for coping and ability to cope with disasters.

2.2.2. The effect of traumatic stress on people with few resources is caused by a rapid loss of highly valued resources. Individuals who are already deprived of important resources before the traumatic event, for example due to childhood trauma, abuse or poverty, find it more challenging to cope with the traumatic event. They are at a greater risk of developing psychological abnormalities such as PTSD (Kaniasty and Norris, 2001; Norris and Kaniasty, 1996, cited in Di Clemente et al., 2002). The more unexpected and excessive the loss is, the less likely it is that people with few resources will be able to cope, and the greater the risk of PTSD is. Intervention strategies should therefore:

- Implement the mobilization and provision of valuable resources to minimize the impact of the traumatic event.

2.2.3 Community level intervention influenced by COR theory can also guide community level interventions when coping with large-scale trauma. It aids these interventions by categorizing the resources and by following descriptive steps in implementing intervention plans (Monnier and Hobfoll, cited in Di Clemente et al., 2002). COR applied during large-scale trauma includes:

- The categorization of community resources
- The mobilization of intervention programs to target these resource groups
- Examples of these are:
 - The fostering and mobilization of community pride and cohesion through involving an entire community in the rebuilding of roads, houses and schools
 - Targeting conditional resources such as availability of employment and emergency services, or material resources such as money, heating, transport and fuel.

Descriptive steps in implementing large-scale intervention plans based on COR:

- Firstly identify the scope of resource loss,
- Secondly assess what resources are available to deal with the loss
- Thirdly get community leaders involved to gain a better understanding of the impact of the loss on the community and to prioritize resource loss according to the community needs.

The prioritizing of resource loss can also help communities to implement interventions that focus on resource gain cycles, even before further traumatic events, in order to equip communities with emergency resources long before the event occurs.

2.3 Conclusion on Applications of COR theory

Clinical trials conducted by Hobfoll and colleagues highlighted the importance of the fact that positive change can occur if resources are acquired or enhanced. Interventions based on COR theory must provide opportunities for increasing personal, social and community resources. However, change does not happen in isolation, and although intervention programs are aimed at resources, it is important to consider the greater social and economic factors at play that can serve as obstacles to interventions. Hobfoll and colleagues found that where they failed to produce change was in cases where women reported resource constraints. For example, although multiple sessions were a key to successful implementation, many women were absent from group sessions simply due to lack of transport or childcare for their children (Hobfoll & Schumm, cited in Di Clemente et al., 2002).

In applying COR theory it is important, for any intervention program to be successful, that health professionals consider individual and community-based resources. Individuals may have limited access to resources due to fundamental conditions like poverty, low social-status, racism and unavailability of health care. Intervention programs that try to side step this reality can run the risk of blaming the victim if interventions are unsuccessful.

COR theory also allows for trauma intervention to be devolved. This allows for interventions to reach larger numbers of people. It therefore empowers communities to guide their own recovery and in turn limit their dependency on professional mediation.

3. The Importance of Devolving Trauma Intervention

After a traumatic experience, it has been found that the primary concern and need of people is not necessarily to express their emotions or have a chance to tell 'their story'. In fact, asking people to do so may not be culturally relevant or appropriate (Wessells 2009). Rather, the primary needs and stressors of trauma survivors tend to be more practical in nature, concerning their "problems of everyday living" (Wessells 2009, pp.847), such as food, shelter and income. Indeed, it may well be far more stress relieving to provide traumatized people with, for example, access to transport, or, finances to cover funeral costs, than to facilitate a one-on-one debriefing session.

3.1 The Grassy Park Massacre as a case in point

In 2002, five petrol attendants were found early in the morning, shot dead execution style. Colleagues of the murdered petrol attendants received counselling, as well as financial assistance in order to cover transport costs and the cost of the funerals. On follow-up 6 months later, the colleagues were asked what they had found most helpful in dealing with the trauma. The men confirmed that it was the money given to them, which had allowed them to cover the funeral costs for their colleagues, which had been the most helpful (News24 2002 & Van Wyk 2012).

3.2 Trauma and Resilience:

Drawing figures from the United States National Co-Morbidity survey, Bisson (2007) writes that of almost 6000 individuals between the ages 15-54, just under 60% of males and 50% of females, experienced trauma of some nature. That said, only about 5% of males and 10% females went on to develop lifetime PTSD.

These findings are particularly relevant for a country like South Africa, where large portions of the population face continual and repeated trauma in the form of extreme poverty, HIV/AIDS, gang and drug related violence, and sex crimes. In the period April 2010 – March 2011, 15 940 murders and 150 673 drug-related crimes were reported (SAPS, 2012). Additionally, in 2007, 47.1% of the country lived off less than R322 per month (NGOPulse 2009).

The figures presented in the abovementioned co-morbidity survey highlight the pervasiveness of trauma and traumatic experiences, but also the fact that the vast majority of people recover in time, and go on to live ordinary lives, unaffected and unhindered by PTSD. Indeed, Bisson (2007) identifies resilience as an ordinary and regular response to trauma. While people may experience many stress reactions after trauma, which may last weeks or even months, only a minority go

on to develop a psychological disorder such as PTSD (Bisson 2007; NHS Wales Emergency Planning Guidance 2011).

3.3 Devolution: intervention by nonprofessionals

As such, Bisson (2007, pp.402), in his in-depth review of PTSD, concludes that, “simple, practical, pragmatic support provided in a sympathetic manner by non-mental health professionals seems most likely to be the best first-line response, but needs better evaluation”.

This introduces a key question: In the instance of a traumatic event, particularly on a community scale, who is best suited to intervening and providing meaningful help? Is the answer a trained psychologist, or can the intervention be bodied by community members, volunteers and lay counsellors?

3.3.1 Hobfoll (2001, pp. 363) states, in his presentation and explanation of COR theory, that effective interventions in the face of trauma require practical changes in people’s “objective circumstances”, in other words, in their practical resources and in their environments. He adds to this that interventions may well need to be broad-based and multifaceted (Hobfoll 2001).

In this way, COR theory allows for the trauma intervention process to be devolved. This is particularly important when working with underprivileged communities where trauma is rife, and economic resources are lacking. It is not feasible to assume that there will be enough trained psychologists with the time and capacity to see every member of a community affected by trauma. Additionally, psychologists are highly skilled, and as such, their time is very expensive. Members of underprivileged communities simply do not have the financial resources to access such services.

COR theory in practice, however, does not necessitate the involvement of highly trained (and thus expensive) psychologists. Rather, unskilled volunteers and community members are invaluable to the intervention process.

3.3.2 After a disaster or traumatic event, most people will have various psychosocial needs, but for the most part, a person’s family and community are able to meet these needs (The NHS Wales Emergency planning guidance 2011). Indeed, research has highlighted people’s preference for receiving support from those they are close to – emphasizing that a psychologist or mental health professional may not be the best, or most preferred, person to offer social support to survivors of trauma.

3.4 The strategic stepped model of care

In line with this, when working with trauma survivors, it is important to find out which resources already exist within the social context of the individual or group and which means or approaches people are using to manage their situation. People may have,

“Nonformal supports such as families, friends and neighbours, and they may have formal supports such as traditional social organizations or organized community and government services”

(Wessells, M 2009)

Williams, Bisson, et al (2011) suggest a strategic stepped model of care. There are three parts to this model, which is best conceived of as a hierarchy or pyramid.

3.4.1 The first part of the model can be understood as the base of the pyramid, and is termed “Strategic and Operational Preparedness” (Williams et al. 2011). In short, this base layer of the pyramid is about disaster prevention and management.

- It involves different agencies and institutions working together to, as far as possible, prevent trauma and/or disaster from occurring.
- It also involves putting in place policies and strategies so that when disaster does hit, communities are well placed and knowledgeable of how to handle or respond to the disaster.

3.4.2 The second part of the model, or layer of the pyramid, is termed ‘Public psychosocial care’. It involves the psychosocial support offered by family, peers and community (individuals and organisations), in the form of psychological first aid.

- This involves giving comfort, protection, and taking care of physical needs such as food and medical attention if necessary.
- It also includes encouraging the survivor in goal-oriented behaviour and fostering in them a sense of being in control.
- Reuniting people with their families and putting survivors in contact with support organisations or networks such as LifeLine and the Rape Crisis centre, is also part of this process.

Part of this layer of the pyramid also involves identifying any individuals who may need further psychological help; those who seem to be having continued trouble dealing with their traumatic experience.

This layer highlights the broad-based nature of this model of care. It emphasizes the fact that the community itself carries necessary and helpful skills to aid trauma survivors, and that the help of a mental health professional is not necessarily needed at this stage.

Community members may find it helpful to be trained and educated on how to offer social support and be made aware of the organisations available in the community. This knowledge and training may help this layer of the model to be maximally effective. Community members (the families and friends of trauma survivors) can also be educated on what to look out for and what to do if their loved one does not seem to recover after a few weeks.

The effect of this is two-fold; it promotes community health, and also takes pressure off mental health workers so that they are able to focus on those who need their expertise.

3.4.3 The third component, or tier of the pyramid, is that of 'Personalised psychosocial and mental health care'. If a trauma survivor does not recover naturally over a period of roughly 3-4 weeks, there is a need for this person to undergo psychological assessment.

- A professional psychologist must assess the individual's psychological well-being, and decide whether, and what, intervention is needed.
- Additionally, individuals who are thought to possibly have mental disorders must be referred to the relevant specialist.

Thus, as resilience is the common response to trauma – particularly when trauma survivors receive the care and support of loved ones and community organisations – only a minority of individuals affected by trauma will require the services of a trained mental health worker.

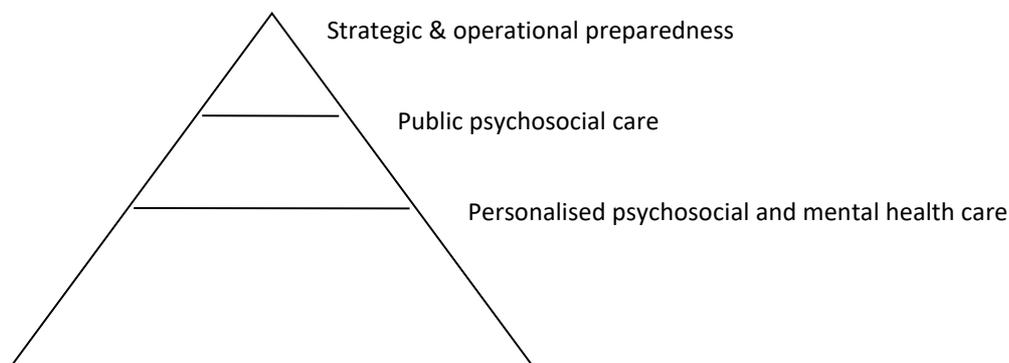


Diagram 1: The strategic stepped model of care

It has been shown that using COR theory enables the process of trauma intervention to be delegated and 'rolled down', with specific benefit to forming

multi-dimensional and broad-based interventions, particularly in under-resourced communities. A further demonstration of COR theory in practice is the work that Hobfoll and colleagues (2007) did in compiling five elements considered to be of great importance to psychological interventions on the level of the individual or the community.

4. Five Elements of Successful Trauma Intervention

There have been many discussions and arguments when it comes to how best to treat trauma victims, so as to prevent the future onset of PTSD. A number of recognized international experts published their consensus on five essential elements of immediate and mid-term mass trauma intervention (Hobfoll, Watson, Bell et al., 2007). These five elements incorporate Hobfoll's COR theory and have a reasonable empirical basis. They are essentially formulated to deal with trauma on a community level, resulting in the ultimate goal of self-empowerment for future maintenance. One should bear in mind, however, that as with the traumatic incident itself, the individual is also unique, and different people and situations require different interventions. These elements are at most a framework on which to base trauma interventions.

4.1 Promote a sense of safety

When people are exposed to a traumatic event, their normally protective environment is threatened and their perceptions of reality change. It has been shown that once a sense of safety is restored the threat of developing PTSD decreases (Hobfoll, et al., 2007). A person who has experienced the trauma needs to separate their perceptions of safety from their actual safety. After a traumatic event, it is common to develop a twisted view that the world, in general, is no longer a safe place and never will be. If they are able to separate this belief from reality, and re-establish a sense of safety, research has shown that their symptoms after the incident will decrease (Hobfoll, et al., 2007). In order to assist this process, one needs to assist by giving corrective information, as well as appraise the past and future threats in a realistic manner.

Restoring faith in a sense of safety is usually a lengthy process and must include a social systems perspective, as the community plays a large role and can affect the process both positively and negatively.

Promoting safety would include:

- protection from rumours, bad news, and negative media;
- family members not talking negatively about the traumatic experience, or dramatizing the event, as is common;
- not being exposed to media, which might put an even more negative slant on the event.

Being exposed to these things will only have a negative effect on the person who is trying to rebuild a sense of safety.

4.2 Promotion of calming

A traumatic event will almost always result in marked increases in emotionality and arousal. This is completely normal, to a certain degree, but should decrease with time. It becomes a problem when it begins to interfere with sleep, hydration, eating, and making life decisions. One study, done by De Young, Kenardy & Spence (2007), showed that a person's heart rate, following a trauma, could actually indicate whether they were at risk of developing PTSD or not. This study has not been confirmed, but it is interesting in noting how physical arousal affects recovery. It is therefore essential that a sense of calm be promoted as soon as possible to prevent a prolonged state of hyper arousal.

It is obviously best, according to COR, to be able to draw on that person's immediate and available resources in order to achieve this calming.

Promotion of calming would include:

- getting influential family members to help reassure the person;
- having that person constantly surrounded by people who have a calming influence on them;
- ensuring the person's emotionality is not pathologized, but should also not be under-pathologized;
- not twisting the truth, in order to calm someone. This does more damage than good by undermining the trauma they have experienced.

4.3 Promotion of sense of self-efficacy and collective efficacy

In life, believing that one's actions can lead to a positive outcome, is vitally important, but even more so following a traumatic event. This is self-efficacy. Collective efficacy refers to the belief that one belongs to a group whose actions can lead to positive outcomes. After a trauma, people lose confidence in their belief that they are able to handle issues that they may face. It is absolutely fundamental to reverse these feelings of a lack of competency in themselves, their families and their community, in order to regulate emotions.

Promoting self and collective efficacy would include:

- Helping the person gain the confidence that they do possess the necessary skills to cope;
- using reassurance and supporting them in getting back to their normal activities;
- rebuilding the sense of the community and its efficacy;
- community mass rallies, religious activities and collective rituals.

When a community is successful and cohesive, this will flow down to the family as well as the individual level. To further assist with this, empowerment must be the focus. Having to rely on trained experts and disaster aid to address community needs, can easily lead to further loss of a sense of efficacy.

4.4 Promotion of Connectedness

There has been a huge amount of research done on the importance of social support and connection to various systems in trauma recovery (Hobfoll, et al., 2007), (De Young, Kenardy, & Spence, 2007). It provides a space to relate and compare experiences as well as formal and informal support groups. A lack of social support and social connections is recognized as one of the important risk factors for PTSD.

Promoting connectedness could include:

- creating awareness about the social connections that are available and how to connect to them;
- eliminating negative social support where the victim is criticized or undermined.

It is vitally important to identify those who seriously lack any positive social support/connections, and focus on them and building their social skills as they are

4.5 Instilling hope

Hobfoll et al., (2007) showed that those who remain positive following a trauma have been shown to have more favourable outcomes and recovery than those who are unable to. Therefore, instilling hope and promoting positivity are paramount in trauma interventions. Victims will often respond to trauma with a “shattered world view” and this negativity and lack of hope can deplete their coping skills leaving them more vulnerable to PTSD.

Hope, in relation to psychology, has been defined as “positive, action-oriented expectation that a positive future goal or outcome is possible” (Haase, Britt, Coward & Leidy, 1992).

Restoring hope would include:

- a strong belief in a God or other religious beliefs;
- a responsive government;
- a positive superstitious belief;
- positive mass media messaging;
- schools, universities, the media and natural community leaders helping to enforce and rebuild hope by helping people focus on the positive and rebuilding strengths.

In conclusion, these 5 elements are core and should be included in all interventions, both individual and mass. Broader-based interventions are needed to include the communities and to make treatment more accessible to those who actually need it. This will also help provide empowerment for these communities, which will assist with continued promotion of trauma prevention and assistance. These 5 principles are not, however, meant to suggest that they are all that is needed or that there is one approach that will suit every situation, but it is certainly a step in the right direction (Hobfoll, et al., 2007) (De Young, Kenardy, & Spence, 2007).

5. COR Theory Limitations

While COR theory has become one of the leading theories when it comes to

looking at stress in various situations, and dealing with resource loss, it, like every other theory, comes with its limitations. The following themes of criticism emerge in the literature.

5.1 Individual appraisal of resources confuses the theory

Lazarus (1991) and Aldwin (1994), quoted in Hobfoll (2001), state that resource loss is purely the product of individual appraisal processes. The concept of resources as subjective interpretations, depending on what the individual considers important. Hobfoll points out, however, that these subjective differences have little predictive value if they are not viewed in the social context in which that individual exists. Resource loss is a stronger predictor (of stress) than appraisal-based measures. This is also true even when only objective loss indicators are considered and when the resource is reinstated there is a reversal of the negative affect. The personal, subjective component is too heavily weighted, as the objective and social components of the appraisal process are often downplayed, leading to the criticism.

Regardless of whether the loss is considered subjective or objective, Hobfoll (2002) says that the fact is that there is still a loss, which is the important fact. Both subjective loss and objective resource loss lead to stress, so whether it is considered to be subjective or objective should not be an issue. It is a resource loss nonetheless.

5.2 Personality traits affect view of loss

Another limitation that was noted is that a person's basic personality traits could confound the loss evaluations (Hobfoll, 2001). It was thought that a person's specific personality traits could affect how they view or handle the loss of the resource. However, studies have shown that, even when controlling for traits like neuroticism and extroversion, loss of resources still led to higher negative affect and lower positive affect, regardless of personality traits. It was also discovered that while certain personality traits may predispose people to loss or slower recovery from that loss-event, resource loss still has an effect over and above any personality trait (Hobfoll, 2001).

5.3 Dual-valence theory of emotions

There is the long-standing dual-valence theory of emotions (Reich & Zautra,

1981; Vinokur & Selzer, 1975) which states that loss-events lead to negative emotions, however, gain-events may lead to just as powerful positive emotions, and that this theory (dual-valence) would explain why loss has been shown to have a greater effect. Negative effect outcome markers have been the focus of loss studies, while the positive emotions connected with gain-events are often not considered.

However, there has been no evidence for this criticism, In fact, it has been shown that loss was the best predictor for both positive AND negative affect (Hobfoll, 2001). This means that even though the dual-valence theory of emotion does relate to COR theory, the fact that positive effect outcome markers are not as weighted as their negative counterparts is not a limitation.

5.4 Different needs lead to unlimited number of possible resources

One of the most frequent and possibly the most obvious criticism/limitation of COR is that resources are limitless, and therefore the theory is useless as it is far too general. Hobfoll tried to identify 74 community-appraised resources (Freedy & Hobfoll, 1995), as well as point out that there are key resources such as self-efficacy, self-esteem, optimism and social support, which were decided upon by communities. Future research is needed so as to avoid reaching the point where everything that is considered “good” becomes a resource. If this point is reached then all resource loss theories will become redundant. It is a lot more difficult to implement an intervention based on a resource loss theory, when the scope of resources is indefinable and indefinite.

5.5 COR needs integration to succeed, and overlaps with other theories

COR is not a stand-alone theory and it must be integrated into the social and behavioural context of the situation. Moreover, where the stress in the situation is more appraisal based, then COR may not be a suitable theory to base an intervention on (as stated above in the appraisal-based limitation).

COR theory overlaps with many other resource theories and borrows much from Antonovsky (1979), Caplan (1974), and Schönplflug (1985). Hobfoll (2001) does not see this as a limitation but rather as just the way in which his theory is built. He does note the difference, though, that COR incorporates the idea that the impact of one’s perceptions is automatic, objective and socially grounded, which sets his theory apart from the other resource theories.

6. Conclusion

COR theory has developed over the years since it was first conceived by Hobfoll.

It has grown to include elements from other similar theories on trauma intervention and has been shown to work in various intervention situations. It has been successfully implemented in community, individual and large-scale traumas alike.

One of the most important aspects of the theory is that it can be devolved, allowing lay members of the community to assist in its implementation and guide their own intervention and recovery. This is extremely important as it leads to empowerment, confidence and sustainable improvement, which could be considered resources in their own right. Hobfoll, Watson, Bell et al., (2007) then extended the theory to 5 basic elements that should be considered in every intervention.

There have, of course, been various criticisms of COR and Hobfoll has tried to refute them. When it comes to a theory based on resources, there will always be an issue when it comes to subjectivity and the vast amount of “things” individuals or communities could consider to be resources. However, Hobfoll clarified that the subjectivity should not be so heavily weighted, as the leading cause of the stress is whether or not a resource was lost, and not so much what the resource was. The theory should continue to evolve and develop as the times change. The available resources will continue to change, as will the things we consider to be resources, however at the moment, it has been shown to be a fairly successful and especially viable theory to implement in trauma interventions of all types.

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