9 Gender and Trauma

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A review of the literature on gender and trauma reveals that in many studies the term gender is employed as if it were synonymous with the term sex. Gender is not a biological reality, but a sociocultural construct that enables researchers to distinguish constitutional characteristics from socially acquired ones. Gender ought to be used as an analytical tool to understand social interactions, inequalities and human experiences including suffering.

Sex and Gender

The terms sex and gender are not alternative nominations of the same phenomenon. While *sex* refers to fundamental biological differences reflected in the physical and psychological characteristics of men and women, *gender* refers to their socially constructed differences and their different locations within the social system. Every culture has different notions regarding masculinity and femininity, attributes different 'typical' characteristics and behaviours to men and women and imposes different role requirements and duties upon them. Everyday life, work, income and human relationships are shaped by norms and traditions that regard and treat the two sexes differently. The values and ideas that are at the basis of these norms and traditions are also reflected in laws, organisations and social structures.

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> … historically specific patterns of gender relations within any culture and community shape individual identity and social interaction, segregating, stratifying and symbolically engendering key social institutions (…) The result is not uniformity in women's experiences but rather diversity, both within any given society and among the world's cultures (Enarson and Morrow 1998:3).

The meanings of being a man or a woman do not only vary from one society to another, but also among different groups of men and women in a given society, at a given time. Furthermore they vary within one culture over time, because the cultural values and meanings that lead to the construction of genders are dynamic and open to change. Femininity and masculinity mean different things to the single individual in the course of her/his development (Kimmel 2000:2–3).

Individuals display their gender identities in varying ways, because gender identity does not have the same salience for everyone. Men in general tend to regard themselves as if they were genderless, because they don't have as many gender-related problems as women, for whom their gender is far more salient. This is very similar to the fact that upper class people or members of a hegemonic ethnic group tend to think less often about class or ethnicity than do members of subordinate classes or ethnicities who are faced with the reality of discrimination. The salience or accessibility of gender as an aspect of the self varies among individuals as well as for the single individual in different contexts (Deaux and Major 2000; Kimmel 2000).

The different ways in which men and women participate in social institutions and processes are shaped by prevailing constructions of gender, and this results in a limited access by women to economic, political and social resources. Most of the time, the treatment of the genders is not only different but also inequitable. Contemporary sociology considers gender as an important dimension of social inequality and stratification, because it is one of the factors that determine the opportunities or obstacles faced by different individuals and groups in a society. Gender is not a fixed category but varies in relation to age, race/ethnicity and class. In a complex society that is stratified and that comprises different racial and/or ethnic groups, there is a hierarchy of genders. According to Connell (1987), men and women have very different life trajectories related to their gender statuses. Even though the dominant gender category in almost every society consists of men belonging to the economically, politically and ethnically most powerful groups, some groups of women also occupy higher places than many men along the gender hierarchy. Such women may be enjoying the privileges of wealth, occupation or social connection with powerful men. In other words, men or women do not experience life in well-defined, uniform ways depending on their sex, but rather in a much more complicated way. Thus, any individual's gender status may change according to her/his age and her/his own or collective experiences of mobility in the stratification system.

The concept of 'gender role' may appear to be similar to 'sex role', but the two concepts belong to different theoretical traditions. In sociological terms, gender is socially constructed, i.e. brought about as a result of human interactions and value negotiations within a culture. The sex role theory proposes fixed and static role sets for all men and women in a given society and implies that these role sets suit the

psychological make-ups of both sexes. The theory of social construction, however, observes that human beings are not passive and mechanic recipients of social roles. During social interaction people choose, interpret, negotiate, produce and reproduce their gender identities and roles.

From a social psychological perspective, gender-related behaviour can be explained by drawing upon two theoretical constructs: the first is the 'self-fulfilling prophecy', based on the observation that people behave to others in accordance with their expectations of them, thus forcing them to react in a certain way in order to fulfil these expectations. This concept refers to people's active role in maintaining and creating social reality. The other theoretical construct is 'self-presentation' and refers to people's choices to present their identities in such a way as to reflect what they think a given context is expecting from them. Both constructs imply that the social environment can channel our behaviours so that we act in accordance with socially constructed gender role expectations (Deaux and Major 2000:84).

Gender stereotypes are characteristics believed to be typical for men or women within a given culture. They shape our expectations regarding what is appropriate for men and women and our behaviours towards each gender. People are encouraged to conform to these stereotypes. Patterns of femininity and masculinity are thus produced, and they direct individuals' choices and behaviours. Across contemporary societies, gender norms tend to become increasingly similar due to the fast exchange of information across cultural boundaries and the resulting globalisation of beliefs and values, as well as fads and fashions. However, in the details, there are still many differences in how gender is constructed in different contexts.

Psychological and psychiatric perspectives that emphasise the personal impacts of trauma and suffering do not explain all aspects of the traumatic experience, because traumatic events always happen in a cultural and historical context that shapes and assigns significance to them. Individuals experience trauma and its aftermath in interaction with this context, and they respond in accordance with their personal as well as sociocultural backgrounds. Structural problems and inequalities prior to the traumatic events are reflected in the composition and characteristics of the victims. Neither is the resulting suffering merely a personal matter. Like every other psychiatric problem, it is identified, labelled and treated by social agents emphasising the restoration and continuity of the individual's functioning in social life.

> In reality, the events we call trauma are part of larger configurations of suffering that have their own social ecology and political economy. Discrete trauma and disasters occur against a backdrop of structural violence that renders some groups and individuals far more vulnerable; focusing exclusively on the trauma may deflect attention from these enduring forms of disadvantage. (Kirmayer et al. 2010:170)

As mentioned above, gender is an important dimension of structural inequality. Therefore, traumatic events and their impacts upon people have to be understood from a gender-sensitive and gender-informed perspective. A gender-sensitive approach to any problem will try to foster gender awareness and to improve gender equity in research, planning, and implementation.

Gender and Health

Gender is an important socio-demographic determinant of health (Lee 1998; Schambler 2008). At different stages of life, men and women have different risks due to their different social responsibilities and lifestyles. The most widely accepted gender difference in health is that women have higher levels of morbidity, whereas men have higher mortality rates. Regarding the facts that men in the USA have higher death rates for all 15 leading causes of death, and that their average longevity is 7 years below women's, Courtenay (2000) has suggested that health-related beliefs and behaviours are one of the many ways in which masculinities and femininities are demonstrated. Accordingly, men engage in a number of health-compromising behaviours in order to prove their masculine strength, whereas women are increasingly engaged in health-promoting behaviours. Obviously, the health statistics and the cultural explanations used in Courtenay's study concern the USA, and individual health behaviours are not the sole predictors of health. However, men's risk-taking behaviours are not specific to the USA, and the health-compromising and risky behaviours of men, as well as their tendency to under-report symptoms (especially those that have been identified as more typical for the female gender), should be studied cross-culturally.

Any health issue may be related to sex, to gender or to both. An example might be women's health problems during the reproductive years. Women's heightened vulnerability to physical and mental hazards in this period of life is not a simple matter of sex. Reproductive risks that are peculiar to the female sex vary in relation to level of education, economic status and marital status. Different groups of women do not only have different health risks, but they also enjoy very different levels of access to health care. Migrant or ethnic minority women may display additionally increased vulnerability due to cultural factors as well as to discrimination and institutionalised racism. Hence, not every woman's health will be compromised to the same degree in the reproductive years.

Gender, Mental Health and Trauma

The theoretical definitions of normality are various, and they tend to change over time (Davison and Neale 1998:6–23). Each of the different approaches to conceptualise normality can be disputed because they entail certain value judgements. The classification systems for mental illness are not universal, and they are also modified over time. From a gender-sensitive perspective, one might apprehend that the definition of normality may partly be based on widely held gender stereotypes. Since the 1980s numerous researchers have emphasised the importance of incorporating gender as an analytic variable into mental health research. Gender-blind theories and research have been criticised because they have reduced women's vulnerabilities to biological reasons, whereas in fact it is mostly social circumstances that increase vulnerability. The belief that women have a constitutional tendency to mental illness is very old and very deeply ingrained in medicine (Russell 1995:4–26; Schambler 2008:151–154). Gender bias extends from models of the human being which draw

upon male behaviours and experiences only to clinical trials that exclude female subjects. For a long time this bias has prevented researchers from studying the gender-specific needs and problems of women. Even sexual abuse and violence as critical life events and stressors have been ignored until recently.

Three major problems have been identified, because of which the relationship between gender and mental health is poorly understood (Astbury 1999:8–9):

1. Evidence on gender is not collected. Even if it is collected, it is not presented in a gender-disaggregated form to inform researchers, clinicians and policy makers.
2. Evidence is lacking on how gender interacts with structural determinants including income, education, workplace and social position, roles related to family, unpaid work and caring and the experience of intimate, gender-based violence.
3. Conceptual remapping is required of all those explanatory models of emotional distress and disorder where large gender differences exist but have not yet been adequately explained due to an excessive focus on biological mechanisms. This is especially important given that gender differences in chronic life stressors, negative life events and violence have not been properly investigated.

Gender socialisation determines which problems men and women feel comfortable seeking assistance for and which conditions they will conceal because they consider them to be stigmatising. This may lead to the under-reporting of certain symptoms and the emphasising of others. Hence, women may be too anxious to report alcohol abuse and feel more comfortable discussing emotional problems, whereas men do the reverse. Therefore, both population screenings and clinical measurements should employ instruments that are sensitive to biases due to gender stereotyping (Astbury 1999:10).

About one third of the total number of injury-related deaths in the world are due to intentional violence (suicides, homicides, terrorism and armed conflicts). The number of both the victims and the survivors of violence and disasters increased considerably during the last hundred years (Kirmayer et al. 2010). There is a growing need to understand traumatic experiences, responses to trauma, trauma-related mental health problems and effective treatment strategies. Trauma has two components: the objective component is related to what has actually happened to the individual, and the subjective component is related with how the individual has perceived and experienced the event. The subjective evaluation of the event determines whether or not it is traumatic.

> What constitutes a trauma then is not entirely dependent on the nature of the event but also on the personal and social interpretation of the event and the responses of the affected person, their family and community, as well as the wider society. Culture influences the individual and collective experience of trauma at many levels: the perception and interpretation of events as threatening or traumatic; modes of expressing and explaining distress; coping responses and adaptation; patterns of help-seeking and treatment response. Most importantly, culture gives meaning to the traumatic event itself, allowing individuals, families and communities to make sense of violence and adversity in ways that may moderate or amplify their impact. (Kirmayer et al. 2010:156)

The gender dimension should be taken into consideration when trying to understand trauma. To begin with, different types of trauma may happen to both sexes at varying frequency, and there may be gender-specific sensitivities towards trauma. Gender-sensitive research can better inform primary and secondary prevention measures as well as therapeutic and rehabilitative models implemented for trauma victims.

Post-traumatic stress disorder (PTSD) is defined as an anxiety disorder 'that occurs when a person experiences an event during which he or she perceives a threat to his or her own life, the life of a significant other, or his or her physical integrity, and the person responds with intense fear, helplessness or horror. Symptoms of post-traumatic stress disorder include intrusive thoughts, such as flashbacks and nightmares, emotional numbing, avoidance of reminders of the event, and hyperarousal, such as increased startle response and irritability' (Ayers 2007:254). Earlier definitions of PTSD emphasised that the precipitating event should be objectively unusual and severe, 'outside the normal range of experience' (DSM III) and 'likely to cause pervasive distress in anyone' (WHO International Classification of Diseases, 10th revision). Until the early 1990s, these definitions were current. Inevitably, research most often focused on extremely stressful events and their negative psychological impacts. PTSD symptoms can occur after various events such as death or serious illness of a close person, parental divorce, family relationship problems, romantic relationship problems, arrest and incarceration or non-life-threatening illness (Gold et al. 2005). Now, such events are also considered to be traumatic if they are reported to have been very stressful for the person. Finally, in the DSM-IV, the event criterion was changed, and the individual's perception of threat was accepted to precipitate PTSD in some cases (Ayers and Pickering 2001). Life stress and lack of social support are among the strongest predictors of PTSD, showing that social factors determine risk of exposure and chances of recovery (Kirmayer et al. 2010). Starting in the mid-1990s, a growing emphasis was put upon resilience and upon the positive aspects of the traumatic experience because most people survive traumatic events without any symptoms of psychopathology, and some of them even report to have mentally benefitted from the experience.

About 1 in 12 adults experiences PTSD at some point in his/her lifetime (Stuber et al. 2006:55). Even though the post-trauma symptoms were initially defined based on the observation of war veterans, PTSD is not a man's or a soldiers' disorder. There is an enormous body of research about the victims of wars, terrorism, road accidents, natural or technological disasters on the one hand and about patients with cancer, HIV/AIDS, difficult delivery or heart attacks, as well as people who have experienced abuse in childhood, rape or assault, incarceration or being kidnapped on the other hand (Matsuoka et al. 2008; Kirmayer et al. 2010). A great part of this research indicates that PTSD is probably more prevalent among girls and women than among boys and men (Tolin and Foa 2006). Women appear to have a higher PTSD risk than men after individual as well as collective or mass experiences of traumatic events (Brewin et al. 2000; Stuber et al. 2006; Bleich et al. 2003; Ditlevsen and Elklit 2012).

One explanation of the gender difference in the prevalence of PTSD might be that women are more likely to experience traumatic events in the course of their lives. The epidemiological data regarding this possibility is mixed and inconclusive (Tolin and Foa 2006), but in fact, most studies point to an increased risk for men rather than women (Creamer et al. 2001; Ditlevsen and Elklit 2010). If the risk for men is actually larger, then women in general must either be faced with events that are more deeply traumatising or they must have a greater tendency to develop PTSD. Women's stronger tendency to develop PTSD may also be related to the fact that the types of traumas to which they are more frequently exposed (e.g. sexual assault and rape) are socially stigmatised, and therefore they do not receive sufficient social support (Nolen-Hoeksema 2011:122). Ideologies, which consider the family unit as sacred and do not approve of interference with domestic violence because it is regarded as an aspect of 'family privacy', also contribute to women being deprived of adequate support and to higher rates of trauma-related problems.

Women's apparently greater vulnerability may be due to differences in the gendered life experiences of the two sexes. This vulnerability is specifically high in relation to assaultive violence, and one might conclude that women's higher prevalence of PTSD may be related to the greater burden of rape. However, even when the rape factor is controlled, the gender disparity in vulnerability persists. What is more, when all types of assaultive violence are taken into account, men are far more frequently exposed to violence (Stuber et al. 2006:55).

Men's and women's experiences of physical trauma constitute a gender issue that is too complicated to be summarised as 'men experience greater physical trauma as compared to women'. This summary statement may be true, but it requires a more detailed analysis: all over the world, men are subjected too much greater physical violence in wars and armed disagreements. However, the age group which is affected is very specific. What is more, in many societies, recruitment to armed forces may be limited to particular strata rather than universal. Men's increased vulnerability to job-related accidents in the workplace is another well-known fact, but again, not all strata of an industrialised society are employed as blue-collar workers. Men's traumatic experiences may be overlooked or poorly understood, because it is difficult for people to comprehend how the 'tough and invulnerable' man can at the same time be a suffering victim. This is why some male survivors of sexual assault have been turned away by rape crisis centres, and one of them was told that the centre had no staff to treat perpetrators (Mejia 2005:31). There is relatively little evidence about the gender-specific experiences of men in relation to traumatic effects. Since men are socialised according to an ideology of masculinity, a core value of which is invulnerability, they are assumed to experience great conflict in cases of victimisation: on the one hand there is the burden of victimisation, and on the other hand, there is the message that they do not measure up to the standards of the masculine ideology (Mejia 2005:38).

The interaction between culture and gender also influences vulnerability. In a study comparing survivors of two very similar hurricanes in Florida and Mexico, women in both groups were found to have higher rates of trauma-related symptoms

than men. However, the difference between Mexican women and men was much larger than the difference between American women and men (Norris et al. 2001). In cultures that segregate genders more strictly and keep women in very subordinate positions, gendered vulnerability to trauma increases.

There also appear to be gender differences in the lifespan distribution of PTSD. In a review of several studies on trauma and PTSD, the highest prevalence of the disorder was seen to be in men in their early 40s and women in their early 50s. The lowest prevalence for both genders was in their early 70s. Overall, the prevalence of PTSD among women was twice as high, but for some ages the female-male ratio approached 3:1. The highest female-male ratio was found for the age range 21–25. The conclusion of the researchers was that for a better understanding of the development of PTSD, reproductive factors and social responsibilities ought to be taken into consideration (Ditlevsen and Elklit 2010).

Reviewing research evidence collected over 25 years, Tolin and Foa (2006) concluded across studies that male participants were significantly more likely to report a potentially traumatic event than were female participants; the observed twofold risk of PTSD among females was therefore not related to higher exposure. A detailed study of the characteristics of the traumatic events revealed however that men were more exposed to specific types of trauma (e.g. motor vehicle accidents, combat, war, disaster or fire, non-sexual assault, serious illness or seeing somebody die), whereas women reported significantly more experiences of sexual assault and childhood sexual abuse. A possible interpretation might be that sexual traumas are more likely to cause PTSD. However, comparing men and women who reported the same trauma categories across studies, Tolin and Foa (2006) found that women had a greater frequency of PTSD in all these categories except for sexual assault as an adult, where the PTSD frequency did not show any significant gender difference. When other symptoms occurring after traumatic events were examined, men were found to tend towards more aggressive behaviours and substance abuse, whereas women tended towards anxiety and mood disorders. This finding was interpreted by Tolin and Foa as being probably related to varying social expectations (2006:979). Although the authors explain that their interpretation is speculative, it sounds fairly reasonable in the light of what we know about gender differences in response to stress: while men try to suppress their anxiety and to fight rather than to remain passive, women show more passive reactions to threatening events and environments because both genders have gone through processes of socialisation imposing exactly these behaviour patterns upon them. It is the deeply internalised ideologies of femininity and masculinity, rather than biopsychological differences, which seem to explain these different outcomes.

In a study examining gender differences in post-traumatic vulnerability in the face of terror attacks in Israel, women were found to be six times more likely to develop PTSD than men. The elevated vulnerability of women was interpreted as being attributable to gender differences in terms of safety, coping strategies and self-efficacy. Israeli women were observed to manifest an emotion-focused coping strategy as opposed to the problem-focused strategies of men. While men tend to overcome stress by being active outside the home, talking about problems and

looking for solutions, women tend to stay at home, to worry about their friends and families and to share their anxiety with others. The male strategy appears to strengthen self-efficacy, optimism and feelings of personal safety, whereas the female strategy appears to increase worry and other negative feelings, making it more difficult for women to overcome traumatic stress (Solomon et al. 2005: 6–7). Another way of expressing the difference might be that women are suffering from gender-typical behaviours: spending a lot of time in the private sphere and caring for the problems of others is the age-old and almost universal behaviour pattern of women that has been shaped by the social division of labour between the sexes.

There are also some arguments that the increased PTSD prevalence among women is due to a report bias, in that men tend to under-report and women tend to over-report symptoms. This may be true to some extent because of social expectations about women being vulnerable and men being tough and resilient (Ditlevsen and Elklit 2010:8).

Some traumatic events like life-threatening illnesses, accidents or assault are very personal. They happen to a single individual or to a small group. Giving birth is also a very personal major life event, and it may be experienced as very stressful or even as traumatic by some women. There are different study reports indicating perinatal trauma and PTSD during the early period after birth. Up to 10 % of women have severe traumatic stress responses to birth (Ayers 2004), and 24–34 % of post-partum women may have one or more traumatic stress symptoms (Takegata et al. 2014). The prevalence rates of reported PTSD range from 1.5 % to 9 % (Ayers and Pickering 2001; Beck 2004; Ayers et al. 2007; Garthus-Niegel et al. 2012; Takegata et al. 2014). These are findings of studies in developed countries, and data from underdeveloped populations are necessary for obtaining a fuller picture of this highly gendered issue.

There are significant differences between birth and other events that cause PTSD. Birth is predictable, in many cases entered into voluntarily, experienced by the majority of women, and socially approved. What is more, a healthy newborn is a reward that can make up for the pain and anxiety associated with labour. On the other hand, birth may threaten and sometimes damage bodily integrity in a way which is different from other traumatic events, and it requires a great deal of readjustment. Since infant care is an intensive and full-time activity, mothers will also be steadily reminded of the event of birth and may have a hard time recovering (Ayers et al. 2009).

Delivery-related stressors and previous depression have been found to predict post-partum post-traumatic stress (PTS). Risk factors contributing to PTS and PTSD have been grouped as (1) prenatal factors (e.g. previous traumatic deliveries, history of infertility and complicated pregnancies, delivery of an ill or stillborn baby, depression, childhood sexual abuse, etc), (2) nature and circumstances of delivery (e.g. long, hard, extremely painful labour, forceps delivery, emergency caesarian section, lack of control) and (3) subjective factors during delivery (e.g. feelings of powerlessness, lack of social support, fear of harming the infant, fear of harming oneself, fear that one may die or the infant may die) (van Son et al. 2005). A longitudinal study showed that women's subjective birth experiences had the

highest association with PTSD symptoms (Garthus-Niegel et al. 2012). More research is required to confirm risk factors and to explain the role of particular variables such as history of sexual abuse, lack of control in birth and blame after birth (Ayers 2004). A qualitative study examined thoughts and emotions during birth, postnatal cognitive processing and memories of birth. As compared to women without symptoms, women with postnatal PTSD reported more panic, anger, thoughts of death, mental defeat and dissociation during birth, fewer strategies that focus on the present, more painful memories, intrusive memories and rumination, with the implication that women with signs of mental defeat or dissociation should be offered postnatal support in order to prevent PTSD (Ayers 2007).

Women with negative expectations about birth tend to have negative experiences during it. The negative expectations are associated with anxiety (Ayers and Pickering 2005). It has been shown that women who fear the process of birth and women with symptoms of anxiety and depression tend to have subjectively negative birth experiences, and these experiences predict post-partum post-traumatic symptoms (Garthus-Niegel et al. 2012).

Research on postnatal distress has identified that the degree of social support (especially partner support), life events, circumstances of mothering and infant temperament are important factors for the development of depression in the first year (Small et al. 1994). Mothers in whom post-partum distress symptoms persist tend to describe their infants as ‘slow to warm up’. Such infants are characterised by a low level of adaptation, low activity, moderately negative responses to new stimuli and moderate irregularity of biological functions (Di Blasio and Ionio 2005). It is hard to decide whether babies are perceived and described as ‘difficult’ because the mothers are in distress or whether their distress is actually an outcome of the difficult temperament of the infant.

Postnatal PTSD does not only influence the woman’s mental health, but probably has adverse effects upon the infant, the existing children and the family unit. On the other hand, the comorbidity of PTSD with other psychiatric disorders may result in misdiagnosis and ineffective treatment (Ayers 2004). In a qualitative study, women with postnatal PTSD reported fear of childbirth as well as changes in physical wellbeing, mood, behaviour and social interaction. Their relationships with their partners were negatively affected including disagreements, sexual dysfunction and blame for events of birth. Most of them admitted to having initially rejected their infants, and in the long term, they seemed to develop avoidant or anxious attachments (Ayers et al. 2006).

All this points to the necessity of much better and person-centred care for mothers. The medical care and social support mothers receive during pregnancy and labour and the months following these may vary in association with socio-economic variables such as level of education, income and occupation, as well as with the status of the woman in her cultural group. In other words, the highly mystified ‘joy of mothering’ is a gender issue, and women receive unequal shares of it, depending on their social locations. This joy is likely to be limited not only by social location, but also by uncontrollable natural and social events. Detailed research on theoretically vulnerable women (e.g. mothers in forced marriages, adolescent mothers,

women living in poverty and/or social isolation, migrant and refugee mothers, women giving birth without assistance, women experiencing pregnancy and birth during catastrophic periods such as wars or disasters, women with histories of rape and torture) may supply more information about the problem and lay the foundations of adequate policies for supporting women.

Even though labour-related trauma might appear to be a sex-specific problem, there are some studies showing that men can also experience stress and depression related to the birth of a child or to miscarriage. Ayers et al. (2007) have shown that 5 % of men and women had severe symptoms of PTSD which were not associated with the parent-baby bond or the couple's relationship.

Bereavement is considered to be one of the most stressful life events which people face. The loss of a loved one, especially of a partner, can be experienced as a traumatic event and have long-term effects on an individual's mental health. A review of studies on psychopathology related to widowhood revealed that especially during the first year, the rates of mood and anxiety disorders are elevated in widowed people. Major depression (22 %) and PTSD (12 %) are widespread, and there are increased risks of panic and generalised anxiety disorders. However, the authors state that based on the study data, it is impossible to understand whether there are differences in vulnerability between genders (Onrust and Cuijpers 2006). Depression is particularly common in widowed men. In studying this issue Umberson et al. (1992) have taken into consideration the gender differences in marital relations as well as in psychological distress. The authors stress that men often suffer from a lack of psychosocial support in widowhood, because often it is wives who organise and maintain couples' social networks. Women usually have confidants outside the family, while men tend to prefer to confide in their wives only. The loss of a wife often means isolation and lack of support. Widowed men do not only have to deal with the stress of social isolation, but they also have difficulties in managing the household. Women on the other hand have greater psychosocial support and are more effective in running their everyday lives, but very often they suffer from financial strains. The authors conclude that men's apparent vulnerability to depression in widowhood is actually an outcome of the different circumstances and meanings of widowhood for both genders. Another study focusing on sex differences in depression due to widowhood explored whether environmental strains such as a lack of social support or concerns about finances and housekeeping explain these differences. The findings revealed that widowhood is associated with higher levels of depressive symptoms and that this association is stronger for men than for women. The effect of widowhood is mediated by different types of environmental strain for men and women. The authors concluded that women adapt to widowhood more successfully than men (van Grootheest et al. 1999).

For parents, the death of a child is an extremely traumatic event, causing more intense and long-lasting grief than perhaps any other loss. A reasonable question might be whether there are any gender differences in the response to the death of a child. Comparisons between fathers' and mothers' responses to this event yield inconsistent results (Büchi et al. 2007). In many samples, fathers seem to suffer as deeply as do mothers, but there is a need for more cross-cultural data on this point,

because motherhood does not have the same meaning everywhere. In a context where motherhood is almost the only way for a woman to be fully accepted by the family and the community, the loss of a child may be perceived as directly threatening the mother's existence.

Gender and Mass Traumas

Responses to individually experienced traumas may be different from the responses to traumas affecting a group or a community. In order to see whether there are gender-related differences in the prevalence of probable lifetime PTSD after a major traumatic event affecting a large community, a study was conducted involving a sample living in the New York metropolitan area, 6–9 months after the terrorist attacks on September 11, 2011. To understand the factors that explain gender differences in PTSD risk, the following were assessed: the number of previous life stressors, the type of previous life stressors (sexual assault, non-sexual assault, non-assaultive trauma), pre-existing mental health problems, social support (perceived support, group participation, marital status), the number of recent life stressors, the type of recent life stressors (work, family, parenting) and peri-event panic. Of these, peri-event panic appeared to have the strongest relation with PTSD vulnerability. Women were not found to have a greater likelihood to develop symptoms of PTSD related to the attacks, but they had higher rates of re-experiencing and hyperarousal symptoms. The researchers concluded that this gender disparity in symptoms was largely due to higher rates of peri-event panic among women. Previous experiences of sexual assault, peri-event panic, pre-existing mental health problems, race/ethnicity and marital status (divorced, widowed or separated) explained the higher prevalence of lifetime PTSD among women. The authors commented that panic may be related to cognitive appraisal of the consequences of the event or to biological sex differences in panic susceptibility, and they concluded that women may be more vulnerable to personal assault, but their vulnerability to other types of trauma may be closer to men's (Stuber et al. 2006).

It has been pointed out that studies examining the impact of terrorism on nationally representative samples in developed countries are relatively few in number, except for the studies conducted in the USA after the terrorist attack on the World Trade Center. In a study concerned with Israeli people exposed to terrorist attacks (Bleich et al. 2003:616–617), women were found to present significantly more PTSD symptoms than men (16.2 % and 2.4 %, respectively). Women also had a higher frequency of TSR symptoms and feelings of depression than men. Interestingly, both PTSD and TSR symptoms were also associated with lower income, and women born in Israel had lower degrees of TSR than those born outside Israel. The associations of PTSD and TSR with income and birthplace suggest that in this sample the higher rate of traumatisation for females does not reflect a simple sex difference, but rather different social locations within one gender. Another study by the same authors (Solomon et al. 2005) examining gender differences in post-traumatic problems in response to terrorist attacks during the Al-Aksa Intifada

(September 2000–April 2002) revealed that women had more post-traumatic and depressive symptoms than men and were six times more likely than men to develop PTSD.

The findings of a study on the terrorist attacks on the World Trade Center revealed that even though people all over the country were traumatised immediately after the event, which could be witnessed through the media, these stress responses were mild and transient, showing that there is a relation between physical proximity to an event and the degree of distress. The trauma-related responses in the initial weeks after the event were once again stronger in female than in male participants (Matt and Vazquez 2008).

The Nazi Holocaust is one of the most significant large-scale traumatic events of the twentieth century, and its psychological impact has been studied from the late 1940s onwards. Because of a law passed by the West German government in 1956 that granted restitution to victims, the emphasis of initial case studies was on finding evidence of impairment. Hence, the dominant theme was severe debilitation in survivors. From the 1970s on however, a less pessimistic picture of post-war adjustment emerged (Lurie-Beck et al. 2008). Obviously, many of the survivors have managed to adapt to life, and one should not forget the philosophical, scientific and artistic contributions of persons who have turned their suffering into valuable lessons for and about humanity. On the other hand, the criticism is also levelled that the Holocaust is generally discussed from a gender-blind perspective, disregarding or perhaps choosing to forget about women's specific experiences in this horrific process (Ringelheim 1997).

Armed Conflicts, Wars and Trauma

The problems experienced by military veterans, especially veterans of the Vietnam War, and the studies focused thereupon have enabled scientists to identify traumatic events and their effects. Fifteen years after the end of their service, about 500,000 soldiers still had post-traumatic stress disorder (Nolen-Hoeksema 2011:119). Initially, the cases studied were predominantly men. Meanwhile there is also some literature on war trauma in women, because one cannot ignore the exposure of civilians to trauma during wars. Kirmayer et al. report that about 50 % of the casualties were civilians in the World War II, rising to 80 % in the 1980s and 90 % in the 1990s, the largest number being women and children (2010:162). Another interesting source of information about war trauma in women is constituted by studies on the increasing numbers of females in the US army (an army which continues to engage in active warfare in different parts of the world).

Not only is the number of women in the USA army increasing, but the roles and functions they take are also becoming more similar to men's. Whereas about 7,000 women were deployed to Vietnam and served as nurses or in clerical positions in the army, 200,000 women were deployed in the more recent conflicts in Afghanistan and Iraq. Women in the US army are officially still barred from direct ground combat positions, but many of the women deployed to Iraq or Afghanistan served alongside

men, gaining considerable combat experience. Research on deployment and combat stress in the USA army members shows that men report exposure to a larger number of combat-related stressors, while women report greater stress relating specifically to hygiene and gynaecological issues, and both report similar levels of perceived threat. The likelihood of PTSD and other trauma-related disorders is almost the same among men and women (Vogt et al. 2011; Vogt and Street 2013). This may be interpreted as reflecting the significance of professional training in overcoming gender stereotypes and bringing about similar responses in both genders.

On the other hand, there is a gender difference relating to sexual assault in military life (Street et al. 2013). Since the risk of exposure to sexual violence within the military was observed to be high, the US veteran health administration adopted the term 'military sexual trauma' (MST). MST refers to severe forms of sexual assault that tend to have lasting deleterious consequences. Veterans all over the country were screened for MST, and positive screens were associated with higher rates of mental health comorbidities including PTSD and dissociative, eating and personality disorders and higher suicide risk. A significant gender difference was observed, with approximately 22 % of the screened veteran women as opposed to 1 % of men reporting MST (Kimerling et al. 2007). This difference can be interpreted as showing that MST is predominantly a woman's problem, but since the total number of male veterans is still much higher (than the total number of female veterans), even a prevalence rate of 1 % calls for intensive measures to identify and rehabilitate male victims. The authors of the study comment that prolonged exposure to MST is very similar to family violence, as both are associated with dissociative symptoms, personality disorders and self-harm.

War trauma is not peculiar to people who actively participate in the army. As already stated, modern war technologies have victimised masses of civilians along with soldiers. What is more, civilians generally have to put up with great adversities and stress during times of war. Worries about what may happen, grief for the lost ones and scarcity of material resources create a lot of distress. In 2004, 42 % of Afghan citizens had PTSD, and 72 % had other anxiety symptoms. Because they were controlled, oppressed and abused by the Taliban warriors, there was an increased likelihood of women developing psychopathology; 90 % reported some symptoms and 42 % were diagnosed to have PTSD (Nolen-Hoeksema 2011:120). A study in Bosnia revealed that women who had been exposed to long-term war trauma had serious post-traumatic and other psychological symptoms, 10 years after the war. About 28 % of the study participants met the criteria for PTSD diagnosis, and 7.5 % had partial PTSD. The researchers also observed that everyday post-war stressors (e.g. personal health concerns, changes in occupational and social spheres, loss of loved ones) contributed to the intensity of post-traumatic symptoms and other disorders (Klaric et al. 2007). A study on war-affected samples from Bosnia-Herzegovina, Macedonia, Croatia, Kosovo and Serbia revealed generally high prevalence rates of anxiety and mood disorders as well as substance abuse, even several years after the Yugoslavian War. The results were interpreted as being consistent with other studies pointing to the long-term mental health consequences of wars (Priebe et al. 2010).

Mass torture and sexual violence against civilians also accompany most wars. Sometimes men and children are attacked too, but it is generally women who are traumatised on a large scale. Women are taken hostage, raped, forced into prostitution, left pregnant or sterilised in order to demoralise and humiliate their nations or ethnicities. Rapists may belong to the enemy as well as to 'friendly' forces, and even members of UN peacekeeping forces have been reported to commit rape and sexual abuse (Chinkin 1994). New conceptualisations of war rape in international laws define rape as a war strategy and a weapon (Farwell 2004). A few of the well-known examples from the twentieth century include the 'comfort camps' established by the Japanese during World War II where about 200,000 women of different ethnicities were imprisoned, raped and tortured by the Japanese soldiers; the 200,000–400,000 Bengali women who were raped by Pakistani soldiers during the 1971 War of Liberation; Vietnamese women raped by US soldiers during the Vietnam War; Kuwaiti women raped by Iraqi soldiers during the invasion in 1990; the massive rape, torture and murder of Moslem women by Serbs in Bosnia-Herzegovina during the civil war of former Yugoslavia; and state-sponsored violence during conflicts in Rwanda, Guatemala and Burma (Chinkin 1994; Sancho 1997; Farwell 2004). During the final preparation of the present paper, hundreds of Iraqi women have been raped, killed or forced to become sex slaves by the terrorist ISIS warriors.

In Turkish culture, men are often praised for being actual or potential soldiers of the nation. The violence they endure in battles is glorified not only in the name of the nation, but also in the name of religion. Similar notions may exist in many of the world's cultures, since wherever we look, it is men who decide to start wars and who engage in active fighting. However, women's suffering in war is shameful, degrading and traumatic, and people often prefer not to talk about it or do not acknowledge survivors for what they have had to put up with. Actually, in many such instances, surviving women cannot return to their parents or husbands, or if they do, they remain silent for the rest of their lives. Not only are the psychological and social impacts of war rape profound, but they carry grave health and reproductive consequences as well.

While it is a widely used practice to weaken the enemy by degrading female bodies in times of war, there is also a tendency towards increased violence among civilians during wars. Crime statistics for 110 countries from 1900 onwards have revealed that there are substantial increases in homicide rates in countries after wars. This has been explained as follows: war '1. weakens the population's inhibitions against aggression, 2. leads to imitation of aggression, 3. makes aggressive responses more acceptable and, 4. numbs our senses to the horror of cruelty and destruction, making us less sympathetic toward the victims' (Aronson et al. 2002:445). Putting together all this evidence, one might say that during wars, women suffer much more than usual from various types of violence (combat violence, domestic violence and sexual violence). This is another trauma and gender issue that requires being studied in depth and detail.

Wars and armed political conflicts often lead to waves of illegal migration, either because people want to escape the violence or because they are being persecuted. In

many countries, governments try to discourage refugees and asylum seekers and apply harsh policies of deterrence which may add to the existing traumatic symptoms of these people. Even if they are accepted as refugees, their everyday life is generally filled with adversities such as unemployment, housing problems, difficulties in adapting to the new language and culture, discrimination and missing and worrying about those they have left behind. Epidemiological studies about refugees in different parts of the world indicate many mental health problems (Kirmayer et al. 2010). A review of 20 psychiatric surveys on refugee people settled in the Western countries has shown that the average rate of PTSD is around 9 % (Fazel et al. 2005).

Victims of torture are another group of trauma survivors, a frequent occurrence during wars and armed conflicts and inevitably among refugees. Organised violence may result in repetitive and extended traumatic stress followed by high rates of PTSD. If the victims are internally displaced or seeking asylum, then they are found to be suffering from a variety of additional and potentially continuous everyday adversities. The prevalence rates of PTSD are around 40 % in asylum seekers (Hensel-Dittmann et al. 2011). Compared to men, women are at greater risk of being the victim of organised violence. Unless politically active, they are also poorly prepared for the risk of torture. Women are also at increased risk for gender-based violence, in particular rape. As with all torture methods, the goal of torture rape is generally to destroy individual identity and specifically to disturb sexual functioning. The international legal community has only very recently accepted rape as a form of torture, during the ethnic cleansing incidents in Bosnia and Rwanda. The war criminals there were the first to be prosecuted for war rape and sexual slavery (Quiroga and Jaranson 2005).

Disasters, Trauma and Gender

Disasters are mass traumatic events which need to be studied extensively with respect to gendered vulnerability. The gender-neutral stance of most disaster theory and research has been claimed to mask the gendered organisation of social life (Enarson and Morrow 1998:171). In many research reports about disasters, gender is used as a quantitative demographic category only, but there is also a growing body of literature in which gender is a central analytic concept. This literature is concerned with the social inequalities, power relations and women's subordinate position prior to disasters that influence how women and girls will be affected within a disaster-stricken community (Enarson et al. 2007). This approach also enables one to understand that the higher rates of post-traumatic symptoms and distress among women are due to social and cultural rather than biopsychological differences. This is not to say that men have no gender-specific risks in the face of disasters. However, especially when faced with natural disasters, women and girls suffer more. There are more female casualties in many cases and higher rates of trauma-related psychological problems in women.

Generally women also have more serious economic problems in the aftermath of disasters (Enarson 2000: 9–23).

A good example for gender differences in disasters are earthquakes as a category of natural events that happen suddenly and bring about great casualties as well as property damage, if they hit densely populated and poorly prepared areas. The prevalence of PTSD reported in earthquake victims varies between 13 and 95 %, depending on the degree of severity and impact. Some victims may not develop the full range of PTSD symptoms, but only some of them, and are thus diagnosed as having subthreshold or partial PTSD (PTSS). Both categories of disorders are observed more frequently in females than males (Lai et al. 2004).

Norris et al. (2002) reviewed empirical literature on disasters between 1981 and 2001 and analysed the results of 160 samples covering 60,000 victims. Being female was among the factors that they found to increase most consistently the likelihood of adverse outcomes for adults (psychological problems, health concerns, problems in living, non-specific distress, loss of resources). The other factors increasing adverse outcomes were severity of exposure, middle age, minority status, secondary stressors, prior psychiatric problems and weak or deteriorating psychosocial resources. With regard to gender, the authors found that 'not every study looked for gender effects, and not every study that looked for them found them' (Norris et al. 2002: 229). Still, 49 articles described a statistically significant gender difference in post-disaster stress, distress or disorder. Ninety-four percent of these studies reported that female survivors were more strongly affected. The differences concerned not only adults but also female children and adolescents. After many disasters, women were almost twice as likely than men and boys to develop PTSD. The gender effects were greater within samples that had additional risk factors for impairment. In some studies, culture was shown to interact with gender in predicting outcomes. The risk to women appeared to emerge at the stage of subjective interpretation, because they tended to estimate the duration and/or severity of their exposure to the disaster in a more pessimistic way than did men.

Analysing disasters and demographic data in 141 countries over the period 1981–2002, Neumayer and Plümper (2007) found that (1) natural disasters and their subsequent impact on average kill more women than men and female casualties are also younger on average; (2) major calamities led to more severe impacts on female life expectancy than do smaller disasters and (3) the higher women's socio-economic status, the weaker the effect on the gender gap in life expectancy. Hence, 'it is the socially constructed gender-specific vulnerability of females built into everyday socio-economic patterns that lead to the relatively higher female disaster mortality rates compared to men' (2007:1).

Although many disasters affect larger populations or communities, the individual responses to them vary depending on the personal and collective meanings attached to the event. Some population groups (women, children, elderly people, handicapped people, the poor and ethnic minorities) are considered to be at greater risk in the face of disasters. This does not imply that young to middle-aged healthy men who are not minority members and who have sufficient command over material

resources will be the only survivors. It is obvious however that they have greater chances of survival and recovery.

Gender in mortality rates varies according to type and location of disasters. Greater numbers of male casualties are reported in some weather-related disasters such as tornadoes and thunderstorms. Gender norms and the masculine ideology may encourage more risky behaviour on the part of men during the disaster, and men may tend to seek less advice and support afterwards. They may also be more active in rescue and later in reconstruction, which are risky types of work. Their increased alcohol consumption and violent behaviours can also be considered risk factors (Nelson et al. 2002). Enarson and Morrow state that while much of women's disaster experience is ignored and distorted, men's gender-specific experiences are also concealed by gender-neutral research, and there is a 'female victim/male rescuer paradigm' that masks women's active roles before, during and after disasters (1998: 171).

Poverty is another important factor of vulnerability, and there is a good deal of literature about disasters in the poor South. A review of literature on poverty and disasters carried out in the 1980s and 1990s illustrated that the poor in the USA are also more vulnerable to natural disasters. This increased vulnerability is due to factors such as qualities of residence, building construction and social exclusion (Fothergill and Peek 2004).

> The review shows that socio-economic status is a significant predictor in the pre- and post-disaster stages as well as for the physical and psychological impacts. The poor are more likely to perceive hazards as risky; less likely to prepare for hazards or buy insurance; less likely to respond to warnings; more likely to die, suffer injuries, and have proportionately higher material losses; have more psychological trauma and face more obstacles during the phases of response, recovery and reconstruction. These differences are significant, and they illustrate a systematic pattern of stratification within the US. (Fothergill and Peek 2004:103)

Emotional vulnerability is related to class status, and lower-income disaster victims suffer more psychological impacts than do higher-income victims. Poverty is deepened by the loss of resources in disaster: unemployment and economic crisis in the aftermath strike the poor much more strongly, and few of them have access to adequate health- and psychosocial care facilities (Fothergill and Peek 2004). These findings about the poor in the USA apply to a much greater extent to the poor in the underdeveloped countries, and 70 % of the world's poor are women anyway.

Besides gender and poverty age, race and ethnicity are also important socio-demographic variables that are related to disaster vulnerability. In many cases however, data is reported without an analysis of the intersections between these variables and gender. Research subjects are divided into categories such as 'black', 'white', 'male', 'female', 'lower class' and 'middle class'. It is therefore hard to see what happens to a black female belonging to the upper class or to an elderly man belonging to a religious minority (Fothergill 1998:12–13). Feminist studies on disasters have shed some light upon women's specific problems, but there is a huge need for studies that are sensitive to the needs and circumstances of groups with varying social locations.

As well as economic problems, there are also cultural and organisational reasons for women's vulnerability. Women who are at the same time household heads and who bear responsibilities for the domestic group are especially vulnerable. Discrimination against women and female children can be aggravated in the crisis phase when the community is trying to share limited resources. Women often lose their security and may be forced to prostitution. The health and subsistence problems of their children represent ongoing stressors for most women (Wiest et al. 1994). The caretaking role of women becomes also more complicated after disasters, because they often have to take care of disabled persons or may be disabled themselves (Enarson et al. 2007). If food is scarce, as it usually is during the crisis period, women may eat last and least in order to make sure that their husbands and children are sufficiently served (Sultana 2010).

In many societies, women have no or very poor access to information and decision-making. This prevents them from being well prepared for disasters and directing communities' decisions with regard to disaster work. Conventional behaviour and dress codes sometimes prevent women from leaving their shattered houses, running away or climbing or swimming to safety if necessary. Their responsibilities for their children or the sick and elderly also limit their capacity to rescue themselves. The 2004 Asian earthquake and tsunami killed about 400,000 people in 12 countries, and in certain regions up to 80 % of the deaths were women and children. On the morning of the tsunami, many of them were on the beaches, fishing or working at morning markets, and most of them could not rescue themselves due to their traditional long garments that restricted their movements, as well as their not having been allowed to learn to swim. Still others were at home and drowned while trying to save their children. In communities where the sex ratio of the population is altered drastically, surviving women and girls have additional hardships, because they may be coerced into marriages, encouraged to have additional children, assaulted or raped (Amaratunga and O'Sullivan 2006). There are other examples of large earthquakes, cyclones and floods in Russia, Japan, Guatemala, Egypt and Bangladesh where many more females than males died, again because they could not leave their homes due to caretaking responsibilities or for fear of blame and punishment in case anything happened to the family property (Fothergill 1998).

Regarding the psychological impact of disasters, many studies report that women and female children complain of more emotional problems, stress, depression and PTSD, often aggravated by the difficulties of caregiving, while men tend to use more alcohol. But the results are mixed, and some studies report greater distress in men (Fothergill 1998). A review of studies about disasters in different countries over 40 years (1963–2003) (Galea et al. 2005) revealed that women were consistently reported to have a higher prevalence of PTSD. Research on gender differences in risk perception reveals that women perceive disaster risks as more serious than men. They report experiencing more fear about earthquakes and other natural or man-made hazards. They are also more likely to take warnings seriously and to evacuate. Despite their increased awareness, they are assigned very few roles in decision-making and preparation (Fothergill 1998).

After a disaster, women often have difficulty finding or building shelters, finding employment and restructuring life. Very often the frequencies of sexual assault and rape increase in communities (Thornton and Voigt 2007). Even if the family unity is saved, the extreme hardships following disasters very often lead to domestic unrest and violence (Fothergill 1998; Fothergill and Peek 2004; Enarson et al. 2007; Kümbetoglu and User 2010). Violence in the community and sexual assault may result in unwanted pregnancies, miscarriages and the spread of sexually transmitted diseases, especially HIV/AIDS (Sultana 2010). Disasters also cause many hygiene, health and reproductive problems for women. Clean underwear may not be available, especially after floods and earthquakes. Polluted waters may lead to infections. Women's poor nutritional status and poor access to health care combined with disaster stress often leave them very weak. Giving birth during or right after a disaster means that labour will take place under the most adverse circumstances, and the infant and the mother will be deprived of adequate medical care. A pregnancy may also be highly complicated under disaster circumstances. Very similar risks have also been mentioned for times of wars and other armed conflicts.

Under the circumstances outlined above, it is inevitable that women will be affected most badly by disasters and that they will experience high degrees of traumatic stress. Their problems are not due to constitutional vulnerabilities, but to social, economic and cultural factors. In any disaster-stricken region, women belonging to the upper socio-economic strata, living in safe dwellings and commanding over adequate resources, will suffer far less than their less well-off peers.

Gender and Perceiving Benefits in Adversity

The belief in positive changes following adverse experiences and suffering is quite old. There are various religious and philosophical notions about the self being tested by hardship, learning from this, and attaining a higher level of development. In the twentieth century a number of authors pointed to the possibility of psychological development resulting from life crises. From the 1990s on, a growing body of literature emerged that emphasised the positive outcomes of highly stressful events. Referring to these positive outcomes, Tedeschi and Calhoun coined the term 'post-traumatic growth' (PTG). Even though numerous other concepts such as 'stress-related growth', 'transformational coping', 'perceived benefits', 'blessings', 'positive adjustment' or 'thriving' refer to a process of psychological maturation after suffering (Siegel and Schrimshaw 2000:1453; Linley and Joseph 2004:11), the most widely used concept appears to be 'post-traumatic growth' (PTG).

PTG is defined as a positive change in ones belief or functioning as a result of the struggle with highly challenging life crises. Tedeschi and Calhoun (2004:5) describe trauma as a psychologically seismic event that leads to the collapse of and necessitates the reconstruction of the individual's cognitive processes. The new schemas of the individual incorporate the trauma and possible future events. The individual experiences these cognitive changes as growth. The authors have identified five domains of growth: (1) greater appreciation of life and change of priorities, (2) more intimate and meaningful relationships, (3) a sense of increased personal strength,

(4) identification of new possibilities in life and (5) change and growth in the domains of spiritual and existential matters. Personality characteristics such as extroversion, openness to experience and optimism may be facilitative for PTG. The authors have constructed a measurement instrument (the post-traumatic growth inventory) to assess growth in these five domains (Tedeschi and Calhoun 1996). This instrument was translated, validated and used in many other contexts too (e.g. Karanci and Acarturk 2005; Jaarsma et al. 2006; Nishi et al. 2010; Karanci et al. 2012; Taku et al. 2007; Kimhi et al. 2010). The cross-cultural studies on PTGI indicate that post-traumatic growth is not an American construct only. This phenomenon can be observed in other cultures, but the factors may be somewhat different than those identified by Tedeschi and Calhoun.

The positive changes due to PTG are often reflected in personal relationships, self-perception and philosophy of life (Sawyer et al. 2012). In other words, PTG means that one has not only recovered from the stressful episode, but also surpasses the level of functioning one had before the occurrence of the traumatic event (Hefferon et al. 2009:243). A person's perception of his or her ability to deal with hardship can be positively altered after having survived a trauma or adversity. This altered perception of the self can also empower the person in the face of future problems and suffering.

Initially the researchers using this concept were concerned with growth after events which were considered as typical in the trauma literature. Hence, people who had experienced combat, natural disasters or sexual violence were studied in order to determine the degree of growth. Later, Calhoun and Tedeschi explained that they were using the words 'trauma', 'crisis', 'highly stressful events' and other similar terms as roughly synonymous expressions describing sets of circumstances that represent significant challenges to the adaptive resources of individuals and their ways of interpreting the world (2004:1). Recently and associated with the change in the definitions of trauma and PTSD, other highly stressful events such as diagnosis and treatment of cancer, heart attack, work problems or migration have also begun to be considered as facilitating PTG. Research on PTG has rapidly grown including patients with melanoma; bone marrow transplantation; spinal cord injury and brain injury; adult childhood cancer survivors; breast, prostate, and testicular cancer patients; patient-partner dyads; and children's medical problems as well as survivors of house fires, sexual assault and combat. Refugees, people who had been taken hostage, Holocaust survivors and former German child soldiers of World War II were also examined for PTG (Zwahlen et al. 2010; Sawyer et al. 2012; Forstmeier et al. 2009; Chun and Lee 2008; Tedeschi and Calhoun 1996; Tedeschi and Calhoun 2004; Widows et al. 2005; Lurie-Beck et al. 2008; Hefferon et al. 2009; Garland et al. 2007; Jaarsma et al. 2006).

Despite the large numbers of reports on PTG, one should not assume that growth is an inevitable result of trauma. What is more, growth may often coexist with continuing personal distress. According to Tedeschi and Calhoun, there are important differences between PTG and the phenomena resilience, hardiness and sense of coherence. PTG has to do with positive changes, whereas the latter are related with coping, and people with a high capacity for these mechanisms will probably not report a high degree of growth, because their coping will prevent them from being

too badly challenged by trauma or adversity (Tedeschi and Calhoun 2004). There are also studies that have aimed at identifying which coping strategies are positively related with PTG (for a brief review see Chun and Lee 2008:878). Among factors found to be contributing to PTG are experience of meaningful engagement, social acknowledgement as a survivor (e.g. appreciation of and positive reactions to one's traumatic experience) and experience of meaningful family relations including emotional intimacy and gaining trust, emotional expression and openness to experience (Jaarsma et al. 2006; Chun and Lee 2008; Forstmeier et al. 2009).

PTG should not be expected to take place after all kinds of traumatic events. In a study with Bosnian people after the war in former Yugoslavia, considerably lower degrees of PTG were observed. This finding was interpreted with reference to the degree of traumatisation. The Bosnian people had experienced multiple traumas, and the system surrounding them had also collapsed. The authors suggested an inverted-U relationship between severity of exposure and growth, in which medium stress is linked with the highest average growth (Powell et al. 2003).

Women tend to score higher on the post-traumatic growth inventory, and the greatest differences exist in their ability to perceive spiritual and relationship changes (Tedeschi and Calhoun 1996: 468), probably because women rely more on social and spiritual support when they are faced with stressful events. There are also gender differences in the perception of new possibilities and personal strength, but these differences are smaller. It seems that women have a greater capacity for positive learning from adversity. In a review of 39 studies, in which not only PTGI but also other measurement instruments had been used, the evidence with regard to gender differences in psychological growth after adversity was found to be mixed (Linley and Joseph 2004:16). However, differences as well as similarities of outcome should be considered with caution, as long as the sample characteristics, measurement instruments and types of adversity studied vary.

A review of 57 qualitative studies published over a period of 32 years revealed that besides the five elements of PTG identified by Tedeschi and Calhoun, a sixth element emerges in relation to people who have suffered from life-threatening diseases. This is described as a new awareness and a heightened perception of the importance of the body as well as a new and positive identification with it, leading the person to take increasing responsibility for his or her health, to omit health-compromising habits and to engage in health-promoting behaviour (Hefferon et al. 2009). Even though a gender analysis is not attempted in this review, 16 of the studies reviewed are about women with breast cancer, 1 about lymphoedema in women, 1 about arthritis, osteoporosis and fibromyalgia in women and 3 about women with HIV/AIDS. One may say that a considerable body of evidence has been accumulated and a review from the gender perspective might be very useful, especially considering the fact that women tend to have a heightened sensitivity about their bodies because of cultural pressures emphasising physical beauty, fitness and youthfulness in the female gender.

PTG in cancer patients was found to be related to gender, with women reporting significantly more PTG than men (Jaarsma et al. 2006). A study with breast cancer patients showed that PTG moderates the relationships between post-traumatic stress

symptoms and depression as well as impaired quality of life. In this study, Morrill et al. (2008) interviewed survivors of breast cancer and assessed PTG as well as PTDS, depressive symptoms and quality of life, finding that PTG moderates between post-traumatic symptoms and both depressive symptoms and quality of life. At the same time, they found that women with better educational and financial status enjoyed greater well-being. This evidence implies that social differences within one sex may determine the degree of negative as well as positive effects of a traumatic event. Neither breast cancer nor any other life crisis will affect women of different social status in uniform ways, because there is no essential and uniform female existence, but rather various existences shaped by social, cultural and material means and circumstances. Although all women may be expected to experience breast cancer as a life-threatening as well as disfiguring disease, their individual differences in intellectual endowment, world view, perception of the female role or material means of improving their health and their looks will probably affect their responses to the disease.

Another gender-specific context within which PTG has been studied is childbirth. In one study, about 50 % of a sample of 219 women were assessed as having experienced PTG in four of the five domains measured by Tedeschi and Calhoun's PTG Inventory. The greatest change was in the appreciation of life, and the smallest was in the domain of spirituality. Growth was not associated with PTSD symptoms, and this was interpreted to imply that women experience growth after birth, even if labour has not been perceived as traumatic (Sawyer and Ayers 2009). However, in a prospective study aimed at examining the correlates of post-traumatic growth after birth, the strongest predictors of growth were found to be operative delivery and post-traumatic stress symptoms, and average levels of growth were lower than generally reported in other studies (Sawyer et al. 2012). Parents who have been traumatised by losing a child have also been studied. Two to 6 years after the death of a premature infant, parents were found to be suffering still. The mothers experienced higher grief and scored higher on PTG (Büchi et al. 2007).

A qualitative study on African-American, Puerto Rican and non-Hispanic white women living with HIV/AIDS in New York, USA (Siegel and Schrimshaw 2000), revealed that almost all of them experienced some growth related to the distress of their illness. The forms of growth varied in relation to the women's ethnic backgrounds, class situations and intravenous drug use histories. The authors criticised previous research on PTG for being confined to educated, middle-class, mostly male samples (often students) and supplying very little information about women and ethnic minorities. Their study showed that for disadvantaged groups, PTG may have different meanings. The study participants declared that they experienced problems including stigma, disability and distress. Nevertheless, most of them believed that the illness had also contributed something positive to their lives. Since the adversities they experienced continued due to the chronicity of their illness, their situation was different to that of people who have experienced and recovered from a trauma. Hence, they were evidence that growth may take place in the continued presence of adversity. The forms of growth were various (e.g. women with a history of drug abuse reported positive changes in health behaviours;

African-American and Puerto Rican women emphasised spiritual change; educated, middle-class women were concerned with career changes). Some of the women described very modest changes as growth, but for their circumstances, these changes also meant a lot. These findings show that context is important for the form as well as the degree of growth. What is more, they also point to the usefulness of qualitative techniques in such research, because fixed scale items do not allow the researcher to understand what participants with different backgrounds mean by benefiting from adversity.

Massive traumas have also been found to lead to growth in personal and group functioning in the afflicted communities. In the case of terrorism, the development of new skills and strengths, altruism, sharing emotions, changes in cognitive schemas and positive emotions were identified as dimensions of growth after trauma, and governments were urged to focus not only on minimising the negative effects, but also on promoting positive outcomes and growth (Vazquez et al. 2008). A study on multi-traumatised psychiatric outpatients with a refugee background in Norway revealed that all reported some degree of growth. Sixty percent of these patients were unemployed, 80 % reported post-traumatic symptoms and 93 % reported depressive symptoms. The authors comment that PTG takes time. In their sample they have observed people with a relatively recent refugee experience to have an illusory construct of benefiting from adversity which functions as a coping mechanism. However, people who have had this experience for a long time also have a genuine and constructive growth experience. The authors conclude that clinicians working with traumatised persons should pay greater attention to positive changes after trauma and to monitoring the quality of life among their patients (Teodorescu et al. 2012).

Lurie-Beck et al. (2008) found consistent positive relationships between PTSD symptoms and post-traumatic growth in a sample of 23 Holocaust survivors. The authors suggest that if larger samples of Holocaust survivors can be reached (which is becoming increasingly difficult for demographic reasons) and studied, the results might inform clinicians dealing with more recent examples of mass trauma such as former Yugoslavia, Cambodia, Rwanda, Darfur, Iraq, Afghanistan, Israel and Palestine. A study on survivors of Hurricane Katrina in the USA reported that survivors with relatively good mental and physical health and stronger coping self-efficacy experienced less PTG than survivors with relatively low coping self-efficacy and stronger symptoms of PTSD. This is also interpreted as evidence that people who cope effectively with trauma and prevent themselves from intensive symptoms of PTSD or other stress-related mental problems experience little growth (Cieslak et al. 2009).

In a study about PTSD and PTG in an Israeli sample 1 year after the war in 2009, women reported a higher level of traumatic stress symptoms and lower rates of PTG than men. Since the studies on gender differences in PTG appear to have mixed results, the authors theorise that the association between gender and PTG depends on the type of trauma. On the other hand, a study on former German child soldiers in World War II (Forstmeier et al. 2009) revealed that social acknowledgement as a survivor and the belief in a meaningful world enhance PTG. These two feelings are

incompatible with events considered as shameful by the victims (e.g. rape, torture) or events that have resulted in death or serious injury of loved ones (e.g. accidents or disasters)

Concluding Remarks

Even though there is a vast amount of research considering trauma, PTSD and PTG, comparing the results is difficult: there are great differences in the types of trauma, the cultural contexts of the traumatic events and sample characteristics. On the other hand, clinical assessments and community surveys based on self-report supply data of a very different nature which is hard to compare. Many of the community surveys in the literature are based on phone or web interviews. Phone and web surveys seem to be well established, and there is no reason to doubt that they are being carried out in accordance with the technical and ethical rules pertaining to sampling, training of the interviewers and obtaining informed consent. However, this does not mean that these techniques are beyond criticism. To begin with, they can only be employed in communities where phone or web access is universal. What is more, the average individual in a target community must display a level of intellectual development and literacy that will enable him or her to appreciate the significance of scientific inquiry and of understanding and honestly responding to every question. Even in cases where the presence of such a community can be assumed, it is impossible to ascertain whether the researcher has actually contacted the targeted respondents. Additionally, communication via telephone or the Internet is very limited and does not enable the researcher to establish sufficient rapport or to notice non-verbal cues. All this means that the dependability of such survey results is questionable and that many communities in the world can still not be reached via these techniques. The latter point limits the comparability of research results obtained in different settings. Phone or web interviews are convenient in order to reach large samples from a distance and to collect data quickly, but the qualitative superiority of data generated via face-to-face contact with respondents and backed up by real observations in the field is not negligible.

No matter how the interviews are administered, researchers have to rely on self-ratings and self-reported symptoms in community surveys. Whether these symptoms have any clinical significance and how gender, culture or class biases in reporting will be ruled out remain open questions. Women's greater vulnerability to trauma may be related to willingness to report symptoms, whereas men may tend to under-report because of considerations that identifying oneself as a suffering victim may jeopardise one's masculinity. This concern has been reported in the literature (Tolin and Foa 2006; Vogt et al. 2011). Trying to compare community samples with clinical samples is therefore problematic.

The available evidence indicates that men and women experience different risks, vulnerabilities and reactions in the face of traumatic events. These differences are very poorly analysed with respect to gender as a sociocultural status. Some studies give at least partial information about how sociodemographic

variables affect the impact of trauma, which may enable future researchers to be more sensitive to differences not only between men and women, but also between different groups within one sex. Rather than identifying women as the 'usual victims', researchers should concentrate on understanding the interactions between trauma and the socio-demographic variables of gender, age, ethnicity, marital status, education, income and occupation. Such an approach may enable scientists as well as decision-makers to see how social inequalities create vulnerabilities, and policy measures may be taken in order to improve people's and communities' circumstances before the occurrence of any traumatic event. For a comprehensive understanding of the relationship between trauma and gender, multisite epidemiological research in different cultures might also be very useful. The focus of any research on trauma and gender should be not only on vulnerability and victimisation, but also on agency and growth. However, the possibilities of agency and growth should not blind researchers or decision-makers to the distress and suffering of people.

It should also be kept in mind that instruments of quantitative measurement operationalise concepts, narrowing down the boundaries within which phenomena will be observed. Hence, more qualitative research is required to understand what people experience and how they interpret their experiences. Data obtained with gender- and culture-sensitive techniques may be useful in improving diagnosis and treatment, as well as in preparing different population groups for imminent traumatic events such as deployment or natural disasters.

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