



Physical Safety and Public Security

The Science of Resilience

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Definition

A sense of physical safety and public security is a basic, human need. According to Harold Maslow, “The preoccupation with security reflects the need to maintain safety, which involves longing for protection, surety, and survival” (1970, cited in Bar-Tal & Jacobson, 1998, p. 59). This basic need begins in infancy, described by John Bowlby and Mary Ainsworth in their Attachment Theory, wherein infants’ sense of safety and well-being is organization around the availability and responsiveness of their caregiver, or attachment figure, during moments of stress. The attachment figure becomes the secure base from which the infant can explore the world and return to for comfort, support, care, and protection. The attachment figure provides both physical and emotional safety. While the parent-child bond is essential to children’s feelings of safety and security, more recent research has posited that larger social systems of the family, community, etc. also contribute to feelings of security throughout our lives (Cummings et al., 2012; Cummings et al., 2010; Davies & Cummings, 1994). Specifically, Emotional Security Theory (EST; Davies & Cummings, 1994) suggests that children’s feelings of safety and security can be impacted by family conflict or cohesion. Children’s emotional security regarding their bond with their parents and their parents’ bond with each other evolves and changes over time.

Another key concept is “security beliefs,” which can be applied to multiple environments and situations. “Security beliefs are formed on the basis of the perception of threat in the environment with which the individual perceives a difficulty in coping” (Bar-Tal & Jacobson, 1998, p. 59). Beliefs about security or insecurity are the consequence of relations between the individual and their environment and must be understood in their context over time. According to Bar-Tal and Jacobson (1998), individuals evaluate their level of security through cognitive processes; however, Van Gelder (2007) found that perceived tenure security was more strongly influenced by fear of eviction than perceived probability of eviction. Thus, security beliefs are formed by both cognitions and emotions; the resulting security belief is thus subjective and based in the individual’s perception of their own safety rather than the actual safety of the environment. Additionally, Bar-Tal and Jacobson (1998) found that insecurity beliefs are mainly concerned with anticipated harm-loss interpretations, that is, the degree to which a situation is perceived as causing disruption or problems in the future, rather than the damage already sustained.

A concept specific to the workplace is safety climate/ psychosocial safety climate. Safety climate comes from the notion of safety culture, the set of beliefs, norms, attitudes, roles, and social and technical practices focused on minimizing the exposure of employees to dangerous conditions. Safety climate refers to the shared perceptions of people regarding the safety in their work environment. In occupations such as construction, safety climate has been repeatedly associated with physical safety outcomes (Chen et al., 2017). Psychosocial safety climate was developed to capture the outcome of psychological health and has been shown to

be conceptually distinct from other organizational climates, including safety climate (Idris et al., 2011). Psychosocial safety climate refers to shared perceptions of organizational policies, practices, and procedures for the protection of work health and safety that are largely derived from senior management, such as management values, attitudes, and philosophy regarding worker psychological health. For example, if a manager does not prioritize employees' psychological health, we could expect a low psychosocial safety climate that includes a high pressure, high demand work environment that may result in increased work stress.

A sense of emotional/ psychological security is just as important as physical safety. We need to feel secure in our homes, relationships, schools, workplaces, and community. A sense of safety and security needs to exist across a wide range of environments. Integral to feelings of safety and security is the trust that if something does go wrong, we have people and institutions to support us. Social trust, or trust in one's neighbour and those in one's community, has long been associated with community resilience. Institutional trust refers to trust in various social institutions and bodies of federal, regional, and city authority. While disasters may inspire an increase in institutional and social trust in the short-term, long-term failures on the part of institutions to adequately meet survivors' needs may lead to a decrease in trust (Thoresen et al., 2018). Support – whether from friends, neighbours, or institutions – is crucial to our sense of security and safety in any environment.

Relationship to Resilience

Attachment Theory

Feelings of security and safety are related to resilience throughout our lives and in many different environments. A good place to start the discussion of the relationship is in infancy, with Attachment Theory. Attachment has been identified as an important predictor of psychological health and well-being (Karreman & Vingerhoets, 2012) and children's socialization, self-confidence, and cognitive performance throughout childhood and adolescence (Davies & Cummings, 1994). It has been theorized that securely attached children have greater "felt" security when facing stressors, allowing them to respond in more resilient ways (Davies & Cummings, 1994). A child who is securely attached is able to use their caregiver/ attachment figure as both a source of comfort during times of stress and as a secure base from which to explore their environment. A securely attached child develops positive mental representations of the self and others, which affects both their internal regulation and their relationship with others. Secure attachment relates to resilience in two ways. Firstly, as highlighted in both Bowlby and Ainsley's Attachment Theory and Blatz' Security Theory, the secure attachment allows the child to explore their environment with their caregiver as a secure base. Having a secure base from which to explore the world is a critical resilience resource for developing children. "While exploring, the child will learn skills and gain knowledge necessary to depend on himself with confidence, so when he encounters a similar situation next time, he will know how to deal with it and thus feel secure" (van Rosmalen et al., 2016, p.

26). As children grow this resilience process, they will gain a sense of security in their own capabilities and knowledge that allows them to become less dependent on their parents; a secure base thus promotes autonomy. However, William Blatz, the founder of Security Theory, notes that complete security in one's capabilities and independence from others is impossible; there must be a combination of independent security and security in the supports of others (van Rosmalen et al., 2016). As such, the second way in which secure attachment relates to resilience is through support seeking behaviours. Secure attachment provides the child with a positive mental model of the self and others which is reflected in confidence in interactions with others, specifically, in seeking support from others. Attachment Theory considers support seeking as the primary strategy when confronted by stressors (Karreman & Vingerhoets, 2012). Having a secure attachment in infancy means that as the child grows, they will develop positive working models of the self and others that promote support seeking responses to stress and result in greater resilience (Karreman & Vingerhoets, 2012). This is a relationship that continues through to adulthood; Karreman and Vingerhoets (2012) found that in a sample of 632 individuals, aged 16 to 67 years old (mean age = 36.92, SD = 13.06; 305 men and 327 women), secure attachment positively predicted well-being and this effect was partially mediated by secure attachment predicting higher resilience.

Emotional Security Theory

Emotional Security Theory (EST; Davies & Cummings, 1994) builds on Attachment Theory to suggest that children not only experience a sense of security in the parent-child relationships, but also through the strength of their parents' relationship with each other. Confidence in the availability of attachment figures is built up slowly during years of infancy, childhood, and adolescence, EST suggests that children's exposure to marital interactions, parenting practices, and other family experiences influences their sense of emotional security (Davies & Cummings, 1994). However, the emotional security derived from experiences with parental interactions is distinct from processes of emotional security derived from parent-child interactions. Although there has been less research on the specific processes of the relationship between emotional security and parental/ family interactions, there has been significant evidence that family cohesion can provide feelings of security in the face of community violence and insecurity, ultimately resulting in more prosocial behaviours and protection from externalizing and internalizing behaviours and child adjustment problems (Cummings et al., 2010; Cummings et al., 2012). Emotional security is well linked with resilience in that it can support children's ability to cope with stressors. "Emotional well-being and a capacity for emotional regulation in the face of stress are at the core of emotional security" (Davies & Cummings, 1994, p.389). According to EST, children who are emotionally secure about their parents' relationship have confidence in the stability and predictability of their family interactions and in the continuing psychological and physical availability of their parents. Similarly, Bowlby (1973) suggested that emotional security is linked with children's sense of predictability and control, which have been identified as important resilience resources.

Further support for EST and the role of the family in children's sense of security comes from research on family routines and rituals. The first research on family rituals concluded that they were "powerful organizers of family life, supporting its stability during times of stress and transition" (Bossard & Boll, 1950 cited in Fiese et al., 2002, p. 381). Research has found that once children reach preschool age and can more actively participate in family life, routines can become more regular and rituals more meaningful (Fiese et al., 2002). Family routines and rituals can help families cope with stressors such as chronic health issues (Crespo et al., 2013), and divorce (Fiese et al., 2002) by providing children with a sense of security and stability in one aspect of their lives. [See our write up on Orderly and Regular Routines for more information on the relationship of routines to resilience].

Security is important in many spheres of a person's life, from family relations, interpersonal relations outside of the family, in work or in school, in leisure-time activities, and in the greater political sphere (Bar-Tal & Jacobson, 1998; van Rosmalen et al., 2016). Although the specifics of security and safety feelings differ across environments, the core relationship between security and resilience, or insecurity and impaired well-being and functioning, remains present. Despite this consistency, there are two areas that deserve special attention: workplace safety climate and the relationship between trust in institutions following disasters and resilience.

Insecurity and Maladjustment

Feelings of insecurity can be generated by political and military conditions, as well as threats to job continuity, personal economic hardship, crime, health problems, etc. Political insecurity can be especially insidious so as to affect people at multiple levels of individual and social functioning. In McNeely et al.'s (2014) study of the effect of political conflict on people living in Palestine, they discuss "human insecurity," defined as feelings of fear for the safety of one's self, family, and home. McNeely et al. (2014) found that human insecurity was significantly related to feelings of depression, culturally relevant expressions of trauma-related stress (feeling broken or destroyed), and functional limits due to poor health. The authors concluded that "human insecurity strongly predicts both physical and emotional suffering" (p. 513). Political upset can also impact the felt security of children when community violence reduces their perceptions of their homes as stable and safe, thus impacting their development. Cummings and colleagues (2010; 2012) looked at children in Northern Ireland in areas of high Sectarian Antisocial Behaviour (SAB), defined as conflicts and violence between ethnic, religious, or cultural groups. They found that as children grow up, they are exposed to more community violence and experience decreased security in the parent-child relationship (Cummings et al., 2010). SAB was related to greater insecurity in the community, in the family, and in the parent-child relationship; furthermore, insecurity in the community was associated with more child adjustment problems (Cummings et al., 2010). In their three-year longitudinal study, Cummings et al. (2012) found that SAB was related to family conflict a year later, which was associated with emotional insecurity; emotional insecurity was then related to child

externalizing and internalizing problems a year after that. Emotional insecurity about family relationships was identified as an explanatory mechanism for children's adjustment problems (Cummings et al., 2012). According to Cummings et al. (2012), "children's feelings of safety and security about their family are undermined by family conflict, and indirectly by community conflict and violence, with implications for their adjustment" (pp. 466-467).

There are some conditions that increase feelings of insecurity, such as poverty. Poverty and violence, and consequentially fear for one's safety, are highly related (Diprose, 2007). In a large study involving 47 countries, the most prominent concern for those living in poverty was for physical safety and security. These feelings of insecurity and fears for safety can have negative impacts on well-being. In one example, Weir et al. (2006) found that concerns about safety limited children's outdoor physical activity in inner city neighbourhoods. They found that parents' anxiety regarding neighbourhood safety was significantly higher in the inner city environment than in the suburbs, and that in the inner city, the overall amount of children's physical activity was negatively correlated with parental anxiety about neighbourhood safety, whereas this relationship did not exist in the suburban environment (Weir et al., 2006). Physical activity is incredibly important for children's healthy development and has been identified as a resilience resource [See our write up on Physical Activity]. As this example shows, insecurity can cause people to sacrifice important resources for the sake of safety. This balancing of different securities can also be seen in Kaplan et al.'s (2015) research with transgender women in Beirut, Lebanon. These women described different realms of safety, including social/ emotional, physical, sexual, and financial, that were often in contradiction and required choosing one form of safety over another. For example, some of the women lived with their families and experienced the tension and frustration of a "double life" as they were restricted from expressing their gender identity, however, they accepted this for financial security. Other women left their families to ensure physical and emotional safety and avoid the abuse of their families. Many of the participants described sex work as a way to ensure financial safety even though it posed a threat to their sexual safety. These women, because of their gender identity, felt a lack of physical and emotional safety on the streets, in public places, in the workplace, at school, and in their sexual encounters. The threats to their safety and security in the workplace, at school, and from their families, meant that many of these women felt they had to turn to sex work to ensure their financial security, but that they could not truly feel secure in their sex work either as financial insecurity may motivate them to engage in unsafe sex. Thus, the insecurity people feel in one area of their life, often in terms of financial insecurity, that is, poverty, may force them to compromise their safety and security in other areas.

Security and Resilience

The relationship between security and resilience has been slightly less well studied than that between insecurity and risk. Nonetheless, there is strong evidence that, as Attachment Theory suggests, those who feel secure in their relationships are able to seek support and better engage in resilience processes when facing adversity. Bar-Tal and Jacobson (1998), in

their study of university students in Israel, found that while the most common sources of insecurity were the political and military climate, terrorists attacks, and the Persian Gulf War, as well as personal events, such as their studies, interpersonal problems, financial problems, and health problems, the majority of students were able to cope with their feelings of insecurity by asking for help from others. Familial support can be especially important for feelings of security, as described by both Attachment Theory and Emotional Security Theory (EST; Davies & Cummings, 1994); it can also be seen in Kaplan et al.'s (2015) work with transgender women in Beirut. For these women, who faced heightened insecurity in many areas of their lives, family support was essential to both social/ emotional safety and financial stability/ safety. Specifically, social and emotional security was tied to family support and acceptance of their gender identity (Kaplan et al., 2015). Although not a quantitative study capable of establishing associations, the authors noted that the one participant who received full emotional security from her family was the only one who reported not experiencing any mental health problems, such as depression (Kaplan et al., 2015). The family can be a source of security through direct support or by providing secure parent-child and marital relationships, as described by EST. Cummings et al. (2010) found that security in the parent-child relationship and security in the family were each significantly related to greater child prosocial behaviours, which they used as a measure of positive child development. Furthermore, in the context of Northern Ireland's sectarian community violence, family cohesion, through security in the parent-child relationship and in the family, acted as a positive influence on children's emotional security, protecting against the negative affect of community violence (Cummings et al., 2010).

Institutional Trust and Security

A sense of public security and safety can also come from outside of the family or immediate relations. Trust in the stability of the government and its ability, through various institutions such as the legal system or the police, to protect you in times of adversity is an important component of one's sense of security and safety. Using data from three large international surveys: the Gallup World Poll, the World Values Survey, and the European Social Survey, as well as previous research using the Canadian General Social Survey, Helliwell et al. (2016) show that social trust, or trust of those in one's community, and trust in the police are highly correlated to well-being, while trust in the legal system, trust in parliament, and trust in politicians are positively correlated, although to a lesser degree, with well-being. Mironova (2015) found that in a sample of 2,061 Russian adults, institutional and social trust were positively related to satisfaction with life, while institutional trust was also positively correlated with satisfaction with work. In McNeely et al.'s (2014) study of Palestinians living in the Gaza Strip, satisfaction with the Palestinian Government was negatively associated with trauma-related stress. In this situation, trust in the stability of the Palestinian Government was a protective factor against the stress associated with ongoing trauma.

There is significant evidence that trust in others and trust in institutions engenders greater resilience following disasters; however, there is also some contention that this

resilience is only in the short-term and that in the long-term, survivors may lose trust in institutions, resulting in increased vulnerability. Thoresen et al. (2018) looked at 98 people who had either survived or lost a loved one to the 1990 fire on the passenger ferry, the Scandinavian Star. The police concluded that the fire was likely arson, but no has been charged; the disaster has received regular media attention over the decades. Thoresen et al. (2018) found that trust in the police and in the justice system were significantly lower in the sample population than in the general population and that participants expressed predominantly negative perceptions of how authorities had handled the disaster. Trust in the police and justice system were significantly associated with current psychosocial adjustment, specifically for barriers to social support, post-traumatic stress, and life satisfaction (Thoresen et al., 2018). The authors conclude that, “almost three decades after the disaster, low institutional trust was associated with more mental health problems, poorer social support, more barriers to seeking social support, and a lower life satisfaction” (Thoresen et al., 2018, p. 7). Similarly, Hommerich (2012) looked at the aftermath of the 2011 earthquake and tsunami in Japan, shortly followed by a nuclear meltdown at the Fukushima Daiichi power plant. As expected, those most affected by the disaster had the lowest levels of institutional trust (Hommerich, 2012). Although Hommerich (2012) notes that high levels of trust in institutions can support people in the process of coping with disasters and overcoming trauma through feelings of safety, support, and being protected, they also found that if an institution gives reason to doubt its trustworthiness, the uncertainty and disappointment is stronger and more damaging when the individual had invested high levels of trust. Older respondents (aged 65 years or older) had the highest level of trust in the government, unless they had been directly affected by the disaster, then they had the lowest levels, supporting Hommerich’s (2012) theory that shattered expectations of the support and security governments provide can be a risk factor. Institutions play a crucial role as trust in their ability to support and protect individuals can be a resilience resource in the face of disasters, while the experience of being disappointed by an institution and coming to believe that institutions cannot provide public security or physical safety may further mental health problems in the long-term following a disaster or trauma.

Workplace Safety

Feelings of security and safety in the workplace are a distinct topic with their own expressions of insecurity and risk. Workplace safety climate, which is a critical factor in predicting the occurrence of physical safety outcomes, has received much attention, but recently, psychosocial safety climate, which looks at psychological health and work-related stress outcomes, has garnered interest. Workplace safety climate is made up of components such as: management commitment to safety, supervisor safety perception, co-workers safety perception, and safety knowledge. It is a crucial predictor of safety in more physically dangerous workplaces, such as the construction industry, where it has been found to significantly and negatively correlate with unsafe events, physical symptoms, and psychological stress symptoms (Chen et al., 2017). In their study of Canadian construction workers, Chen et

al. (2017) found that a high safety climate could reduce workers' job stress, which was highly correlated to physical safety outcomes. Psychosocial safety climate was developed in order to capture the distinct outcome of psychological safety and has been found to be conceptually distinct from safety climate (Dollard & Karasek, 2010; Idris et al., 2011). Similar to safety climate, psychosocial safety climate comes mainly from higher management; specifically, it stems from policies, procedures, and practices that address stress risk factors and the psychological well-being of employees (Dollard & Karasek, 2010). Workers who are exposed to such policies, procedures, and practices as well as the reassurance of genuine care provided by the organization will be better able to offset or cope with the negative impact of job demands, including work pressure and emotional demands (Dollard & Karasek, 2010). In contrast, workplace environments low in psychosocial safety climate may result in higher psychological distress and work-related stress (Dollard & Karasek, 2010), as well as bullying and harassment behaviour (Idris et al., 2011). Psychosocial safety climate has been found to moderate the relationship between negative customer behaviour and employee wellbeing and between job demands and psychological distress (Dollard & Karasek, 2010). In Idris et al.'s (2011) study of Australian and Malaysian primary health care organizations, psychosocial safety climate was significantly and negatively associated with psychological distress and exhaustion; furthermore, it acted as a protective resource at both the individual and team level. Dollard and Karasek (2010) suggest that one of the mechanisms behind psychosocial safety climate is the role of decision making and control, which have been shown to reduce psychological distress in the workplace. Dollard and Karasek (2010) argue that in an environment with low psychological safety climate, where they do not feel safe or protected, employees may be less willing to make decisions or exercise control, whereas policies, practices, and procedures that promote a high psychosocial safety climate will empower employees to exercise their control and decision making. Dollard and Karasek (2010) argue that a high psychosocial safety climate can thus foster resilience at both the individual and organizational level.

Intervention

Circle of Security (COS) for Parent-child Attachment

The Circle of Security (COS) is a relationship enhancing intervention based on the Attachment Theory framework (Dehghani et al., 2014). It is a 20-week, group-based parent education and psychotherapy intervention designed to shift patterns of attachment in the caregiver-child relationships to a more secure attachment. The focus of the intervention is on shifting the caregiver's patterns of behaviour and their inner working models of attachment-caregiving with their child, which should lead to a shift in parent-child interaction, and subsequently a shift in the child's pattern of attachment. Each caregiver is guided at their own pace towards increased skill in reading the child's cues, reflecting on the child's thoughts and feelings, and reflecting on their own feelings, plans, and behaviour. This reflection is achieved by watching films, seeing video clips of their children and themselves, and reviewing

interactions with their children. The intervention works best with small groups ($n = 6$) and was designed for toddlers or pre-school aged children and their caregivers.

In a sample of 48 preschool children (58% were girls, and 66% were 5-6 years old) and each child's primary caregiver (age ranged from 25 to 44; all mothers) from Isfahan City, Iran, Dehghani et al. (2014) evaluated the COS intervention. They found that, following the intervention, the experimental group scored significantly higher on measures of attachment and well-being.

Attachment Security Priming via Text Messages

The aim of this intervention is to deliver repeated attachment security primes through a flexible and location-independent method, rather than the traditional time-consuming laboratory sessions or online studies, which depend on people having access to a computer (Otway et al., 2014). The nature of text messages means that the security priming can be easily integrated into participants' daily lives.

This intervention was tested with 50 students from a British university (32 women, 18 men; aged 18 to 42, mean age = 22.43). Twenty-five participants were assigned to the secure priming condition and 25 to the neutral priming condition.

The intervention begins with an initial lab visit, where participants spend 10 minutes writing about a security-inducing attachment figure; in the control condition, participants wrote about a supermarket shopping trip. Then, 24 hours after the lab visit, participants receive a text containing a 3-minute visualization task; they are asked to text 'done' to the experimenter once they have completed the task. This same process is repeated every 24 hours for the next two days. Thus, the total intervention consists of an initial lab visit and three days of text messages. An example of the security priming text is, "Please spend 3 minutes thinking about the person you visualized and how they make you feel safe, secure, and comforted."

Otway et al. (2014) found that security priming, in comparison to the neutral condition, increased participants' felt security immediately after the laboratory prime, after the three days of text priming and one day after the last text prime. The authors conclude that the text messages were effective at maintaining the initial sense of security from the laboratory session.

Psychosocial Safety Climate Intervention

Dollard and Karaek (2010) claim that the best way to integrate an intervention to increase psychosocial safety climate is at the organizational level. They introduced an intervention to help Australian public sector education workers organize into higher levels of coordination. The key piece of the intervention was the development of a social level collective that would identify issues of work-related stress and how best to introduce resources from outside and inside the organization to reduce work-related stress, thus building a stronger psychosocial safety climate.

As part of the intervention, a new social coordination structure was established, including: 1) the state government Occupational Health and Safety (OHS) Roundtable; 2) the Stress Stakeholder Committee (SSC), comprising senior representatives in the Department of Education (DE) and unions, and the state government OHS regulator; 3) the Stress Working Group, comprising representatives of the DE head office and regional department, unions, the state government OHS regulator, and the lead researcher; 4) the regional Steering Committee, and 5) the Work Groups (intervention groups). Participants included nine intervention groups and nine control groups from 18 different schools (n = 655 intervention participants; n = 688 control). Gender proportions (80% women and 20% men) and age range 45-54 (50% intervention, 40% control) were representative.

The intervention included workshops, conducted within schools during the first two months of the study, followed by the implementation of action plans designed in the workshops. Participants attended a maximum of 19 workshop hours, usually four four-hour sessions. The workshops involved training participants in psychosocial risk management by professionals. The interactive group workshops had the following output goals: to develop an action plan of practical measures to reduce identified risks; to specify reasonable time frames for actions to be put in place; and to identify the person(s) responsible for ensuring actions were implemented to reduce risks. In workshops, participants gathered and triangulated data from a range of sources (e.g., aggregated grievance data, absenteeism records, and baseline Tie 1 survey data) to identify potential school and organizational psychosocial risks of local significance. The Regional Steering Committee categorized nine key themes from the action plans developed during the workshops, these were: school discipline and standards, interpersonal demands, student welfare, role clarity, learning/ professional development, workload/ work organizations, resources and facilities, health and well-being, and communication and consultation. The content of the intervention was designed by the participants themselves and implemented over the following 10 months.

Dollard and Karasek (2010) found that their intervention resulted in policies, procedures, and practices that fostered a high psychosocial safety climate, which in turn, facilitated the positive effect of employee decision making so as to reduce psychological distress and emotional exhaustion over time. Furthermore, they found that the intervention increased trust between management and workers and increased management support, both of which are key elements of psychosocial safety climate.

Assessment

Security in the Family Scale (SIFS; Forman & Davies, 2005; Appendix A)

- A self-report measure for assessing children's aggregate analysis of the whole family unit as a source of security and threat. Its development was guided by the emotional security hypothesis (Davies & Cummings, 1994).

- The measure was developed and tested with a sample of children in early adolescence and their caregivers and teachers from the United States (n = 853 children; 421 boys, 432 girls; 288 in sixth grade, 280 in seventh grade, and 285 in eighth grade; mean age = 12.7 years, range = 10-15; 83% non-Hispanic white, 7% African American, 3% Hispanic, and 7% identified as Other. Caregivers: n = 209, 186 mothers, 23 fathers).
- This measure had convergent validity with measures of family functioning, child functioning, and measures of children's security in the parent-child and interparental relationships.
- 22-item measure with a 4-point response scale ranging from 1 (Completely disagree) to 4 (Completely agree).
- Three factor solution:
 - Preoccupation: 8-items that index children's worries about the future well-being of themselves and their families
 - Security: 7-items indexing children's confidence in their family unit as a reliable source of support and protection even during times of family stress
 - Disengagement: 7-items that reflect children's efforts to disengage from and minimize the significance of the family
- Cummings et al., 2010 used the Security subscale of the SIFS, Cronbach's alpha was .91

Security in the Community Questionnaire (Goeke-Morey et al., 2009; Appendix B)

- This 10-item mother-report measure assess the mother's perception of her child's sense of safety and threat about the community. It is sensitive to the cultural context of Northern Ireland, that is, it takes into account the ways in which Sectarian, or politically-motivated, community violence is manifest in this particular community using focus groups. Its development was guided by Emotional Security Theory (Davies & Cummings, 1994).
- 4-point response scale from 1 (not at all like my child) to 4 (a whole lot like my child)
- Developed with a sample of 130 mothers from working class areas in Derry/Londonderry, Northern Ireland. The sample was evenly split between the two major religious groups, Catholic and Protestant (48% each); the remaining reported being Christian (no denomination; 2%) or having no religious affiliation (2%). Mothers completed the questionnaire with regards to one of their children (n = 67 boys; n = 63 girls) between the ages of 5 and 17 (mean age = 12, SD = 3.2).
- Three factor solution: 1) child's fear and vigilance; 2) feelings about security about where the child lived; and 3) security about the areas dominated by the other group
- Initial validation study had an alpha of .69
- Used in Cummings et al., 2010, alpha = .85

Human Insecurity Measure (Mataria et al., 2009; McNeely et al., 2014)

- This measure was developed specifically to measure felt insecurity of individuals in the occupied Palestinian territory (oPt). The items were developed through in-depth focus groups discussions with oPt residents from a wide range of ages, socioeconomic conditions, and political beliefs and included in a revised WHO Quality of Life Measure (WHOQoL), the Palestinian Quality of Life Measure (PQoL; Mataria et al., 2009). It has been used in research in the oPt (Giacaman et al., 2011; McNeely et al., 2014)
- McNeely et al. (2014) used the items from the PQoL specifically focused on insecurity in their study of human insecurity and health in the oPt. The items they used were:
 - “To what extent do:
 - You fear for yourself or your family in your daily life?
 - You worry/ fear that you will be displaced or lose your home or land?
 - You worry/ fear for your future and your family’s future?
 - You worry/ fear the chaos in Palestinian society?
 - The events in Palestine make children in your family feel frightened?”
- Response options were: not at all, a little, a moderate amount, very much, an extreme amount
- Cronbach’s alpha in McNeely et al.’s (2014) study was .80

Safety Climate Measure (Chen et al., 2017)

- In their study of construction workers in Canada, Chen adapted questions from previous research to create a safety climate measure. The measure has six subscales that measure the different dimensions of safety climate. The six-factor model was validated with 837 construction workers (mean age = 37 years, SD = 12; 98% men).
 - Management Commitment to Safety – 6 item scale that examines the priority that management puts on safety, especially when it conflicts with production. Example items include:
 - “Our management provides enough safety training programs”
 - “Our management is strict about safety when we are behind schedule”
 - “After an accident, our management focuses on how to solve problems and improve safety rather than pinning blame on specific individuals
 - Coefficient alpha = 0.87
 - Supervisor Safety Perception – 6 item scale that looks at workers’ perception about whether their supervisors commit to safety. An example statement is:
 - “My supervisor behaves in a way that displays a commitment to a safe workplace”
 - Coefficient alpha = 0.86
 - Co-worker Safety Perception – 4 item scale measuring one’s perception about whether their co-workers have good safety behaviours. An example item is:
 - “My co-worker ignores safety rules” [reverse scored]

- Coefficient alpha = 0.72
- Role Overload – 2 item scale that examines whether a worker feels that there is more work than can be accomplished in the time frame available in one’s job. Both items are reverse scored. An example statement is:
 - “I am so busy on the job that I cannot take normal breaks”
 - Coefficient alpha = 0.62
- Work Pressure – 2 item scale assessing one’s perceptions of whether there is excessive pressure to complete work faster, thereby reducing the amount of time available to plan and carry out work. An example item is:
 - “There are enough workers to carry out the required work”
 - Coefficient alpha = 0.65
- Safety Knowledge – 5 item scale that looks at whether workers know what to do when confronted with unexpected events. An example item is:
 - “I know what to do if an emergency occurred on my shift”
 - Coefficient alpha = 0.79

Psychosocial Safety Climate Scale (PSC-12; Hall et al., 2010; Appendix C)

- The scale was developed in a sample of 100 Australian adults currently in paid employment (52 women, 26 men; mean age = 41.5, SD = 11.49). Hall et al. (2010) reduced Dollard and Kang’s (2007) 26-item Psychosocial Safety Climate Survey to 12 items with a 4-factor solution – the PSC-12
- The PSC-12 was validated with 398 employed Australian adults (179 men, 219 women; mean age = 45.95, SD = 12.25). The four factors had the following internal consistencies:
 - Management commitment = .88
 - Management priority = .90
 - Organizational communication = .77
 - Organizational participants = .80
 - The entire scale had a Cronbach’s alpha of .94
- The PSC-12 correlated negatively with all job demands, emotional exhaustion, psychological distress, and depression and correlated positively with all resource measures, as well as with worker engagement and job satisfaction.
- 5-point response scale 1(strongly disagree) to 5(strongly agree)
- Used in Idris et al.’s (2011) study; Idris et al. (2011) found Cronbach alpha’s of: Australia a = .97, Malaysia a = .92

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Appendix A: Security in the Family System Scale

Forman & Davies (2005)

4-point response scale ranging from 1 (Completely disagree) to 4 (Completely agree)

Preoccupation Subscale:

1. I feel like something could go very wrong in my family at any time.
2. I have the feeling that my family will go through many changes that I won't expect.
3. Sometimes I feel that something very bad is going to happen in my family.
4. I feel that I won't be able to handle some family problems that come up in the future.
5. I don't know what to do about things that are happening in my family.
6. It's hard to know how people in my family will react to each other.
7. In the past few years, my family changed so much that I felt unsure about what was going to happen next.
8. When something I don't like happens in my family, I think about it over and over again.

Security Subscale:

9. I believe that family members will be around to help me in the future.
10. I am proud of my family.
11. It's worth caring about family members, even when things go wrong.
12. I'm glad to be a part of my family because there are more good things about it than bad things.
13. When I think about the problems in my family, I feel that things will work out in the end.
14. When things in my family upset me, I can do something to make myself feel better.
15. I feel I can count on my family to give me help and advice when I need it.

Disengagement Subscale:

16. I don't care what goes on in my family.
17. When something bad happens in my family, I wish I could live with a different family.
18. When something bad happens in my family, I feel like running away.
19. When I'm upset, there's no one in my family who can make me feel better.
20. I don't know why I put up with all the times my family makes me upset.
21. The things that go on in my family don't seem to make any sense.
22. When I have disagreements with family members, it's not worth trying to understand their point of view.

Appendix B: Security in the Community Scale Factor Structure

Goeke-Morey et al. (2009)

4-point response scale from 1 (not at all like my child) to 4 (a whole lot like my child)

	Factor 1	Factor 2	Factor 3
6. My child has at times been unable to sleep at night because of violence in our area.	.93		
7. Sometimes my child feels that something very bad is going to happen in our community.	.86		
3. My child stays in because of the threat posed by the other community.	.68		
2. My child feels threatened by people approaching from the other community.	.63		
4. My child is being hindered from going to the doctor, cinema, dentist, or other places because of threat of violence by the other community.	.61		
8. When my child thinks about the problems in our community, he/she feels that things will not work out in the end.		.72	
10. My child feels safe when walking through our local areas during the marching season.		.69	
5. My child's experiences in this community have provided a secure foundation for meeting other people and going places.		.60	
1. My child feels intimidated by murals, flags, and curb paintings.			.83
9. My child feels safe when walking through an area dominated by the opposite religion during the day			-.60

Appendix C: The Psychosocial Safety Climate (PSC-12) Scale

Hall et al. (2010)

1. In my workplace, senior management acts quickly to correct problems/ issues that affect employees' psychological health
2. Senior management acts decisively when a concern of an employees' psychological status is raised
3. Senior management shows support for stress prevention through involvement and communication
4. Psychological well-being of staff is a priority for this organization
5. Senior management clearly considers the psychological health of employees to be of great importance
6. Senior management considers employee psychological health to be as important as productivity
7. There is good communication here about psychological safety issues which affect me
8. Information about workplace psychological well-being is always brought to my attention by my manager/ supervisor
9. My contributions to resolving occupational health and safety concerns in the organization are listened to
10. Participation and consultation in psychological health and safety occurs with employees', unions and health and safety representatives in my workplace
11. Employees are encouraged to become involved in psychological safety and health matters
12. In my organization, the prevention of stress involves all levels of the organization



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