

DISASTER VIEWPOINTS: ADULT'S AND CHILDREN'S EXPERIENCES OF DISASTER, RECOVERY, AND LESSONS FOR MITIGATION

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Keywords:

Hazard education, recovery, community awareness & recovery

Abstract

Post disaster studies ascertain community levels of preparation, warnings, behaviour and experience. The disaster experience of the community informs knowledge that may contribute to the enhancement of mitigation, education and awareness. Research indicates that recovery from disaster is at least partially contingent upon pre disaster levels of preparation, awareness and previous disaster experience. Community mitigation, response and recovery operates at the level of the household. Most commonly the core of the household is a nuclear family in which children are active partners along with their parents in preparation, experience and the post event clear up and recovery. This paper will particularly examine the experiences of adults at children during and after category 5 Cyclone Larry, that devastated parts of North Queensland (Australia) in March 2006. Recovery issues in a rural community that enhance the mitigation of future hazard events are identified.

Introduction

Disaster mitigation requires community education and awareness. Communities are primarily seen by emergency managers as the adult population of a geographical location. Without going into an extensive discussion of the meaning and definition of community, it is obvious that the most immediate subgroup of any community is its children. The Centre for Disaster Studies recognised children as a separate community group when analysing vulnerability to cyclones in the northern beaches suburbs of Cairns, in North Queensland, and developed educational materials in the form of a CD Rom game, Stormwatchers, aimed at primary school children (Anderson-Berry 2003). At the broader international level the significance of children's involvement in disasters has long been recognised by the United Nations as part of children's rights (Pupavac 2001). Widespread throughout the world hazard education modules form part of formal school curricula. The importance of hazard education for children received further impetus after so many children died in the Indian Ocean tsunami, and was addressed in the Hyogo Declaration (UN 2005).

Subsequently researchers have begun to share findings of projects aimed at children's experiences in disaster and the importance of educating children a hazard awareness (Finnis et al 2004, Izadkhan & Hosseini 2005, Dengler 2005, Balaban 2006, Dunbar 2006, Chen & Wu 2006). After Cyclone Larry devastated small communities to the south of Cairns in North

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Queensland in March 2006, a group of school teachers and mothers gathered children's stories of the cyclone and their survival as a means of aiding the recovery of the children by encouraging communication and the sharing of experiences. Cyclone Larry crossed the Coral Sea in mid-March 2006, developing into a severe category five as it approached the coast south of Cairns. The eye of Larry crossed the coast between 6.20 and 7.20 am on Monday 20th March (Bureau of Meteorology 2006), devastating the small towns of Innisfail and Babinda and surrounding small rural settlements. Rebuilding and recovery has been a long process, that a year later still continues.

The Centre for Disaster Studies carried out a rapid post disaster assessment within a week of the event. This household questionnaire survey was open-ended and generated a large number of comments and observations from the more than 200 adults who participated in 147 households (King et al 2006). The questionnaire was structured in relation to the chronology of the cyclone, from earliest preparations and warnings through the event to the impact, clear up and reflection. Six months later the children's accounts were published by Mitchell et al (2006). The most striking and immediate impression of these accounts was the mirroring of the experience of the adults and the very clear involvement and participation of the children in the disaster alongside their parents and other members of the community. This paper therefore has taken some of the stages of the cyclone in order to examine the shared experiences and viewpoints of the adults covered by the household survey and the children who contributed to the Cyclone Larry Tales of Survival. The comments of the adults were transcribed by the researchers amidst the wreckage of the towns and the ongoing rain. Thus they have been abbreviated into phrases. The children on the other hand wrote their accounts more fully in school. However, both sets of comments and stories present a vivid picture of the experience of a severe cyclone, and illustrate the shared experience of the children. For reasons of confidentiality the names of the adults who participated in the survey were not recorded, whereas the children are named as authors in the publication.

Preparations

People were aware of the approach of Larry before Saturday the 18th (many people were watching it develop from a tropical low long before it was classified as a cyclone). A cyclone warning existed throughout Sunday 19th March, which prompted people to take further activities ranging through family actions, to the yard clear up and purchase of supplies.

Adults:

Cut near trees, opened manhole, informed neighbours, packed up family ready to leave.

Female aged 31

Packed photos, kept preparing, priming kids. Female aged 38

Cleared yard, secured all, put trampoline away, and mobile basketball hoop and clothesline packed in shed. Female aged 43

Froze water, bought generator. Male aged 69

Generally people gave one or two responses rather than indicating that they had prepared on a range of actions. As a community they covered all the activities, but as individual households they were more selective in terms of the actions they took.

Table 1. Further Purchases and Preparations Made During the Warning Period

Purchases & Preparations during warning period	Count	Col %
Batteries	4	2.7%
Tinned Food	3	2.0%
Fresh food	2	1.4%
Fuel	3	2.0%
Check or buy generator	2	1.4%

All of batteries, candles, food, fuel	42	28.6%
Nothing	37	25.2%
Batten down/clear yard	28	19.0%
Store water	2	1.4%
Store water & clear up batteries & candles	9	6.1%
Food purchased and stored	1	.7%
Secure, clear & shop	7	4.8%
Secure personal belongings	6	4.1%
	1	.7%
Total	147	100.0%

Source: CDS household survey

Within families the children were involved in preparation activities with their parents. Most children used the word “we” and described the family discussions and tracking the approach of the cyclone. Some families were told to evacuate from storm surge prone areas and the children add accounts of taking their pets. Common preparatory activities included cutting down old trees, clearing up loose tin, boarding and taping windows and of the parents moving cars and heavy equipment close to the house.

Children:

... we had heard on the news that a cyclone was coming. My family and I were at my grandparents at Innisfail for dinner, we all talked about it. Elizabeth Glinster (Mitchell et al 2006 page 40)

We had been listening to cyclone warnings for days, hoping it would go away. In preparation we taped windows, cleaned up the backyard, found cages for the birds, found batteries for torches, bought food for the animals and food for ourselves. Alexandra Jones (Mitchell et al 2006 page 42)

... as most other people did, we started taking precautions. First we removed all tin and other objects that could cause damage. Then last of all we boarded up the windows and tied things down. Jim O’Sullivan (Mitchell et al 2006 page 10)

As cyclone Larry came closer it intensified and my family and I started to clean up the yard on Sunday afternoon. We taped the windows, cleaned up everything and put the bulldozer next to the house hoping the wind would come in that direction and it would block us from it. We also parked the ute close by in case we had to evacuate. Danielle Silvestro (Mitchell et al 2006 page 26)

The children’s accounts capture some of the nervousness of the adults, the long queues in the shops, some parents praying, and an expectation or hope that the cyclone would pass by. Household respondents also identified many of the things that they did not do well enough, although most felt that they had prepared as well as they could.

Adults:

Panic buying of food. Left everything to the very last minute. Male aged 39

OK. Could do better – needed extra food and gas for barbeque. Female aged 30

Didn’t get dog food or gas. Female aged 34

Most single parents were in rented accommodation so their preparatory activities were different from those of nuclear families, being dominated by clearing up the yard and securing personal belongings.

Family and Communication

Households were asked about special needs and disability issues. Mostly it was elderly households that were affected, but some families identified babies and toddlers as a special need and were more vulnerable in consequence. Families saw the impact on children as

traumatic, while the children's accounts give a strong picture of family unity and shared experience.

Adults:

One child on crutches had to be carried, and, with the high humidity, one child with croup. Male aged 40

Children are disrupted. The young ones still upset. When they heard that Innisfail was being demolished, they cried for 2 hours. Male aged 38

Grandmother (90) worsened, and we had to put her in a home. Male aged 40

Stress. Kids traumatised – they sleep lightly, and wake up at the smallest noises. Female.

Contact with other relatives and with neighbours both before and during the Cyclone was very high. Additionally a number of households had invited their neighbours in or had gone and spent the cyclone with neighbours or other relatives. The same is generally true for those households which were defined as more vulnerable. Contact with other relatives was very high, although contact with neighbours was significantly lower for these groups, possibly because of a strong involvement with family and relatives.

Adults:

Phone landlines in South Johnstone stayed on until Monday night. Female aged 69

We are not particularly close to our neighbours but because it was such a horrible experience, we kept checking out how each household was doing and kept swapping one generator between two households. We buried any negative feelings because the community has got to work together. Male aged 37

Phones out Tues. am. Mobile out Monday. Phones back Thursday. Female.

Children:

I was running over to my friend's house to tell them that the cyclone had increased to a category four. As I told them this scary news I didn't know whether to scream or cry. Well I didn't do either because I knew I had to support my family and friends during the rough times. Mikaylah Obah (Mitchell et al 2006 page 34)

We called friends, they called us. Gurpreeth Singh (Mitchell et al 2006 page 8)

The day after Cyclone Larry we rang up friends on the satellite phone. They had all survived but had wonderful stories. Annie Turner (Mitchell et al 2006 page 18)

My sister Jasmine, who lives in Cairns kept calling to see if we were all right and my auntie on the Sunshine Coast was watching the news and rang to ask how we were and what was happening. Emmalene Krause (Mitchell et al 2006 page 22)

During the cyclone we had many phone calls and text messages, some from Tully friends who forgot to get batteries for the radio and others from the relations and friends in places like Sydney, Brisbane, Moranbah and even America checking up on us. Danielle Silvestro (Mitchell et al 2006 page 26)

Shelter and Pets

Two separate questions were asked concerning where people sheltered in the house and what actions they took in protecting themselves and sheltering during the passage of the Cyclone. The impression from the survey questionnaires was that people chose stronger rooms, centrally located rooms, or rooms that were on the lee side of the house. Thus some people moved about from room to room, but others clearly relocated as the wind shifted. Many older Queensland houses have a hallway or passageway in a central part of the house, while newer houses tend to be much more open plan in the main living areas. Therefore the diversity of responses reflected individual household decisions in relation to position as well as internal architecture. Many older high set houses are built of flimsier materials on the main floor

while subsequent closing in of the area under the house is frequently done with blocks. In such cases the under house room may be the strongest room in the dwelling.

Table 2. Place and Actions in Sheltering During Cyclone Larry's Passage

Actions to shelter	Count	Col %
Evacuate	17	11.6%
Shelter in central room	31	21.2%
Under mattresses	13	8.9%
Under table	2	1.4%
Shelter in bathroom/laundry	16	11.0%
Lounge	14	9.6%
Shelter in bedroom	8	5.5%
Kitchen	2	1.4%
In room under house	12	8.2%
Anywhere/moved about	28	19.2%
In car/garage	3	2.1%
Total	146	100.0%

Source: CDS Household survey

Adults:

- In concrete bunker under house. Female aged 58
- In our underground garage. Male aged 39
- Friends flat – in the stair well, then in the downstairs 'bunker', but the roller door blew in. Male aged 40
- Went to units. Female aged 56
- (family including 3 week old baby). Went to Police Station. Male aged 31
- Put quilts on windows in bedroom. Female aged 65
- The rattles and tree crashes caused us to come out and look. Male aged 75
- Went across road and a palm tree smashed the house next door. Went home. Male aged 78

Some children mentioned going to Dad's place of work, but shelters they identified were mostly safe rooms, windowless bedrooms, bathrooms and toilets, concrete utility rooms and garages under the house, hallways and the middle of the house and even the pantry and inside wardrobes. Some evacuated or went to friends and neighbours and there is frequent reference to hiding under beds, tables and mattresses. The well-being of pets was always important, with families sharing their limited space with a bizarre range of pets and domestic animals and birds, including snakes and horses.

Children:

- I hid under the table. We covered it with mattresses. All the water came in the windows. Samuel (Mitchell et al 2006 page 12)
- I hid in the wardrobe and dad stayed in the house. Mum stayed in the wardrobe with me and Brodie. Riley (Mitchell et al 2006 page 16)
- When it was little and it started we went in the bedroom. When it was big we went in the hallway. Emma (Mitchell et al 2006 page 23)
- What I vividly remember is that when my family was sitting in a little group down in the laundry under a mattress I was wondering if our roof was going to come off. Jack Dorney (Mitchell et al 2006 page 24)
- My horses had to come inside the laundry when the cyclone came so they didn't blow away. Natasja Crowley (Mitchell et al 2006 page 41)

Pets are a significant issue, especially when people are confronted with the need to evacuate. Almost all pet owners are not willing to abandon these household members so that it is not surprising that 66% of all pets spent the cyclone with their owners. The small number that were "out during the cyclone" mostly escaped and bolted and appear to have survived. This

included chickens whose cages were blown away, along with accounts from children of rounding them up, with parents, during the storm. Those that did not spend the time in the same room as their owners were generally secured in an outside shed or the room under the house, but many had lost their cages, including birds and snakes.

During the Eye of the Storm

A number of respondents reported having contact with their neighbours during the passage of the eye of the Cyclone. The eye did not pass over all of the communities that were covered in the survey, or the children's stories -- this was primarily an Innisfail experience. It was daylight by the time the eye passed, so that some went outside out of curiosity, while others helped neighbours and cleared wreckage. This was risky behaviour and both children and adults reported the wind returning while they were still outside.

Adults:

- Went out in the eye to help move neighbour's roof truss. Female aged 64
- During the eye – helped move iron. Male aged 53
- All out in the yard before and after. Male aged 37
- Regularly out of doors in the eye of the storm. Male aged 37

Children:

- We had two turkeys outside in the same cage. So Dad, Ben and I all went out in the middle of the cyclone, I grabbed the chooks and Ben grabbed the turkeys while Dad held down the cage... Emmalene Krause (Mitchell et al 2006 page 22)
- During the eye of the cyclone, when it was quieter, the four of us went outside to survey the damage to our property. We nailed up damaged doors and windows and picked up bits of tin. Jack Dorney (Mitchell et al 2006 page 24)
- During the eye of the storm, Mum urged us to get on the couch where we played with toys and games to distract us from the destruction outside. Bianca Snodgrass (Mitchell et al 2006 page 27)

Feelings Towards the Cyclone

People's perceptions, responses, feelings and reactions are very important in gauging actions and behaviour. The expectation of the impact of the cyclone is equally significant in driving right behaviour and appropriate preparedness. In asking people how they felt on hearing the cyclone warning, no feelings were suggested by the interviewers or the question, so the 50% of respondents who expressed emotions of fear, being scared or worried were very direct and honest. Very few people failed to take the cyclone warning seriously. Most of the rest expressed an emotion that aided them in being prepared - an acceptance and readiness.

The most common response to the Cyclone warning has been summarised as "increased preparations and activity", although this was expressed in various ways including phrases like "get on with it". Those who took no action largely felt that they were prepared and there wasn't much more to do. Many of those who expressed a state of staying calm were parents who relate to this action to being concerned for their children.

Table 3. How People Acted on Their Feelings Following the Cyclone Warning

Acted on Feeling	Count	Col %
Increased preparations & activity	73	50.3%
No action	29	20.0%
Stay calm/don't scare others	29	20.0%
Confused	3	2.1%
Evacuated	6	4.1%

Listen to warnings	2	1.4%
Upset	3	2.1%
Total	145	100.0%

Source: CDS Household Survey

Adults:

- Shocked. Feel sad at loss of others. – houses, banana farms. Daughter is scared, son is happy. There were a few reports of children who remained ‘disturbed’ a few days after impact. Female aged 41 from Babinda.
- Community spirit good, close knit community, a lot of new comers. Male aged 86 at Flying Fish Point
- Strong – mother needed to care for others. Female aged 61
- Thought they were joking. Female aged 65
- Wasn’t really believing it. Male aged 37
- Stopped functioning – petrified. Female aged 56
- Need for urgent response. Male aged 50
- Deciding where to go. Scared and apprehensive. Male aged 60
- Knew we would be in for it. Serious. Female aged 38
- Windows would smash, worried about flying debris and car damage. Male aged 30
- Daughter had panic attack, had to comfort her. Thought we were all going to die. Male aged 30
- Expected extreme damage - more than there was. Expected house to go but it didn’t. Male aged 57
- Devastation, like Titanic. Female aged 38
- No idea, not from area. When I knew it was a cat 5, I knew it would be bad. Female aged 34
- Thought we would lose house. Stressed out Sunday 7 pm when upgraded to a category 5. female aged 39
- Not much. The weather was so calm, so you hope it will not hit. The ABC radio said that the calm was deceptive. Male aged 86
- Terrified, but thankful. Female aged 30
- A bit stunned. A bit slow to react. A bit shocked. Fortunate. Male aged 61
- Gave me a chance to do good service to the community. Male aged 40
- Buy a generator, extra costs and costs of fuel supply.. We were very frightened, so moved to the police station (a worker there). The home was basically undamaged, but we were grateful to have somewhere strong to go to, and are more philosophical about our fear now. Male aged 31

Virtually all of these feelings and fears are replicated by the children’s accounts. The adults in the survey were speaking just days after the event whereas the children wrote their stories some weeks later and are more reflective and philosophical as well as extremely honest. From all of their stories there are a number of impressions that are repeated. These are feelings of anger, scared, excitement, nervousness, terror, bravery and noise as something linked to the fear. They also expressed a feeling of timelessness, sadness, awe, understanding how people lived in the past, wanting and expecting a new life afterwards, and luck and fortune at having survived. Themes of sticking together, being happy in the company of the family, and good feelings towards friends and neighbours are expressed frequently, as well as people yelling, parents and relatives crying and upset, and being calmed by parents. In particular the children personified Larry – he was bad, naughty and cruel etc. The loss of their schools is noted by many children and their strong desire to get back with their friends and restore some normality.

Children:

When I saw the high school in a big heap I felt angry with Larry. Gurpreeth Singh (Mitchell et al 2006 page 8)

I felt saddened, then thought how long it would take for all of us to recover? After all, we survived. Maybe anything is possible if we stuck together. Gurpreeth Singh (Mitchell et al 2006 page 8)

We walked down the street checking on all our neighbours. The damage was awesome, I felt relieved nobody was hurt but sad about the destruction. Chantelle Boase (Mitchell et al 2006 page 14)

The trees fell down everywhere. It made me feel happy because I don't like trees. Kate (Mitchell et al 2006 page 15)

We were all in Cairns when we heard about the cyclone. I felt nervous but excited as we headed for home. In the morning it hit, and I was scared. I came down from the top bunk and sat with my dog, Whiz, because she went a bit crazy. Ian Clegg (Mitchell et al 2006 page 20)

I was scared because I was looking out the window and we saw a shed go down the street. Declan (Mitchell et al 2006 page 23)

(We) ... saw our cousins dressed in their school clothes. We asked why they were in their school clothes and they said school was on. I was so excited I couldn't wait to go to school. Sheryl Vue (Mitchell et al 2006 page 36)

Dad is unhappy his bananas have gone, but he is happy as he spends more time with us. Jordan McAvoy (Mitchell et al 2006 page 50)

Community and Personal Impact

Table 4 records personal impacts and lessons learned from this Cyclone. Responses have been broken down by previous Cyclone experience (Winifred destroyed Innisfail almost exactly 20 years earlier). Having gone through an earlier Cyclone was the reality for 81% of the population. The major responses of "shaken" or "distressed/stressed" were stated by 42% of respondents. The random nature of impact and of households' personal situation meant that primary impacts varied considerably. However when questioned about lessons learned there was a 90% response of be prepared, be ready etc, and take it seriously which implied a similar preparatory attitude.

Table 4. Personal Impacts of Cyclone Larry by Previous Experience

Personal effect	Previously experienced a cyclone			Total	
	Winifred	Other Cyclone	No previous experience	Number	Table %
	Number	Number	Number		
Additional costs	1	1	1	3	2.1%
Shaken	18	7	8	33	22.9%
Disoriented	6	1	1	8	5.6%
Lucky/ good community spirit	8	1	1	10	6.9%
Distressed or stressed	18	4	5	27	18.8%
Frustrated	1	1		2	1.4%
Loss of business/work	11	3	2	16	11.1%
Inconvenienced	8	2	3	13	9.0%
No effect	7	1	2	10	6.9%
Worried	9		4	13	9.0%
Loss of belongings	6	1	1	8	5.6%
Guilty	1			1	.7%
Total %	65.3%	15.3%	19.4%	144	100.0%
Lessons learned					
Be prepared	77	10	20	107	75.9%

Take it seriously	12	4	4	20	14.2%
Keep up morale	2	1	1	4	2.8%
Stay in contact with family & neighbours		1		1	.7%
Unpredictability of impact	1			1	.7%
Evacuate	3	4		7	5.0%
Keep out sightseers		1		1	.7%
Total %	67.4%	14.9%	17.7%	141	100.0%

Source: CDS Household Survey

Adults:

- Lost everything. Financial trauma. Kids are quiet. Male aged 43
- Job uncertainty, no security, homeless. Male aged 50
- Loss of income and closer to neighbours. Male aged 30
- Sugar cane crop – lost 50%; loss on harvesting. Male aged 53
- Everything lost – in the rain for 4 days. Male aged 50
- All stress and heartache. High school is gone. Male aged 53
- No ATMs, no bank, no money for baby's formula. Chemist would give no credit. This was most distressing. Very difficult with young kids. Eventually got some from SES evacuation centre – queued for hours. Female aged 31
- Pretty pleased with the way resources were used. It was a marvellous job, the authorities seemed prepared. Male aged 40
- Roof missing off own business, along with structural damage. Business did not have business interruption loss insurance. Male aged 47
- Male aged 38 Children are disrupted. The young ones still upset.. When they heard that Innisfail was being demolished, they cried for 2 hours.
- Female aged 41 Shocked. Feel sad at loss of others. – houses, bananas, farms.
- Male aged 43 Lost everything. Financial trauma. Kids are quiet.

Many of the children observed the impacts on their parents and the community in the same manner as those of the adults. Commonly repeated impacts were the loss of jobs, especially their own parents, people being upset at the losses, including the children's own losses, the lack of power and pollution issues, including the problem of asbestos.

Children:

- People lost their jobs because the fields were wrecked. Mum lost a few weeks of work. Ian Clegg (Mitchell et al 2006 page 20)
- Mum started crying because we had photos and lots of things that were being destroyed by the wind and the rain. Lauren Brennan (Mitchell et al 2006 page 25)
- It was frightening. It was noisy. We can't go back to our school because the cyclone has wrecked my school. They're going to pull it down. Tomorrow I have to go to the Good Samaritan Hall with a rug to sit on. Aaron Snell (Mitchell et al 2006 page 43)
- I ... walked over to the window. I was shocked! I didn't think it was this bad. There was pink insulation everywhere! It looked like pink snow. I looked out further into one of the paddocks. There was our roof! The loud ripping noise was our roof ripping off. Louise Russell (Mitchell et al 2006 page 28)
- Most rooms were flooded but mine was the worst. I was so upset. Everything was destroyed, nearly all the things in my room got wet, books, posters, my CD player and my bed. Louise Russell (Mitchell et al 2006 page 28)
- There was holes in our roof and all the water came in and we were scared and we were crying. Mum said "don't be scared, be brave". Daniella (Mitchell et al 2006 page 29)
- ... So we came to Pop's house. When finally we got there we were surprised that he didn't get hurt and neither was his cat or dog. His house was very badly damaged and was not able to be repaired. Now he lives with us until he can build a new house. Elizabeth Glinster (Mitchell et al 2006 page 40)

Our house only lost a few windows and a bit of guttering, but Grandma had lost her business. Kylie De Courcey (Mitchell et al 2006 page 51)

There was a tremendous bang as the roof was wrenched from our house and Mum and Dad joined us under the bed. I peered out from under the mattress to see the ceilings lift and the eerie grey sky above. ...Cyclone Larry changed my life forever. Everything that my family owned was destroyed in a few short hours. Megan Smith (Mitchell et al 2006 page 53)

Clear up, Lessons and Recovery

Most houses are fairly old with a mean of 46 years. Cyclone resistant building codes came in during the mid-1970s so that those dwellings that are less than 30 years old are more likely to have greater Cyclone resistance in their structures. Roof loss occurred almost entirely to houses over 30 years old, as is also the case with wall damage. It was estimated by the interview team that approximately 1 in 20 or 5% of houses had been severely damaged or destroyed. Most of these places were consequently unoccupied, with their former residents not being interviewed in the survey. However, 11 houses that had lost their roofs were occupied and their occupants interviewed at the time of the survey.

Table 5. Damage observed in Household Survey

Damage – nearly all properties had some minor damage. Almost all had major vegetation damage	Number	Percent (of 147 households)
None	5	3.4
Vegetation and minor damage	36	24.4
Damage to guttering and other minor	12	8.1
Basically fully uninhabitable	12	8.1
Roof loss or damage	16	10.8
Loss or damage to some walls	10	6.8
Water damage	11	7.4
Windows smashed	17	11.6
Doors damaged	7	4.7
Loss or major damage to shed or garage	12	8.1
Awning damage	34	23.1
Fence damage	13	8.8
	185	125.3

Source: CDS Household Survey. Percent > 100 because some properties sustained multiple damage

People began the clear up of damaged structures and vegetation as early as the eye of the cyclone, and were out as soon as the winds had abated. Initial clear up focussed on securing dangerous items and gaining access. Vegetation damage was widespread, and in a rural rainforest environment vast numbers of enormous trees blocked roads, driveways and backyards. Mutual cooperation appears to have occurred immediately and continued alongside the formal intervention.

Adults:

Boss is being good – all staff being paid and even getting generators and fuel. Happy with the government response – the army came by on Tuesday [21 March] with rations. Male aged 49

Concern over leptospirosis. Male aged 27

Neighbours helped out – brought bread and extra supplies. Felt isolated from authorities because English is a problem. Female aged 81

Many of the children's accounts refer to their involvement in the clear up and they mention

the hard unpleasant work that this involved over an extended period of time. Some of the children clearly lived on farms and were accustomed to involvement in farm-work. Throughout the passages the children use the pronoun “we”, in the clear up as much as in the preparation. It was a family and community effort in which they were fully involved.

Children:

Dad and we kids had to clear the driveway of trees and branches after the cyclone so that we could get out. Jim O’Sullivan (Mitchell et al 2006 page 10)

We cleaned up the paddock and fixed up the fences then I had to go home and dry off the chooks, they were badly traumatised. The next day I helped clean up the rubbish. Selena McMurray (Mitchell et al 2006 page 17)

I helped remove branches by dragging them on the four wheeler to the burning pile we had made. Jack Dorney (Mitchell et al 2006 page 24)

Chainsaw in hand, standing shoulder to shoulder with our neighbours, we surveyed the damage. Then we set to work. Elise Lawrence (Mitchell et al 2006 page 46)

We had so much to do it took us a month to repair most of Larry’s destruction. Conor Johnson (Mitchell et al 2006 page 71)

Conclusion: Patterns of Shared Experience

There is a recurrent pattern of phases to each cyclone. The precursor to many cyclones is the development of the monsoon trough and of tropical low pressure systems, frequently bringing rain before the low develops. Once the low pressure system develops people begin watching and once the cyclone forms and is named, the watch intensifies (the official term of cyclone watch is applied to the period 24 to 48 hours before expected landfall. During this period of increasing tension people make preparations, clear up rubbish and carry on life as normal. The household survey addressed this period of pre impact for the importance of understanding preparatory behaviour and receipt of warning information. The children’s accounts begin with the same period and both mirror and participate in the tension, discussions, actions and preparations of the adults. Both the survey and the children’s accounts recorded where and how people sheltered and protected themselves as well as aspects of the damage, but the children described the experience of the cyclone’s passage particularly vividly. The eye of the cyclone was a stage in the process, where many people left the safety of their houses, attempted some clear up and even rescues of neighbours and animals, but it was also the point of wind reversal and a separate destructive experience. The final stages in the process of the storm were the initial clear up, contact with others and then the long haul of recovery that ran into most of the rest of the year for most people and an ongoing slow recovery for some.

The feelings of both children and adults shifted from the fearful or tense expectation as the cyclone came closer, through the horror, noise and awesome destruction of the event, with its accompanying emotion of excitement, into the shock, sadness and anger after the storm had passed. Both adults and children reflected on their fortune in surviving as well as the trauma of their losses. They expressed philosophical acceptance and many drew attention to the community spirit, the cooperation and the support and efforts of the many groups of relief and recovery workers.

Cyclones bring significant amounts of the rain that falls in northern Australia’s wet season. They are a regular and predictable part of the pattern of the seasons. They configure the experience of life in the north. All are destructive, all are local historical markers, and all cyclones can be prepared for through protective behaviour and mitigation actions. Some cyclones, such as Larry, are severely destructive events, and yet most people who live in the north can expect to go through such an experience every two or three decades. Most of the adults interviewed in Innisfail and the surrounding townships had experienced a previous cyclone and most had been through a severe storm. Most of the children whose stories were recorded by Mitchell et al can expect to go through this experience again in their lifetimes.

The same is true for most of the rest of the children of the north, almost all of whom have so far been spared the practical experience of the Larry survivors.

Education is then of crucial importance in maintaining the safety of all of the people who live in cyclone prone areas. Although it is the primary responsibility of the adult members of the community to make preparations and practise sheltering behaviour that mitigates the impact of the cyclone impact, and thus it is this general community that is primarily targeted in cyclone educational and awareness campaigns, it is clear that the children are equally involved, not simply as passive receivers and potential victims, but as active participants involved with all of their families' activities and engaged with the preparations and recovery of friends and neighbours. Hazard education takes place in school lessons, serving to reinforce the broader community awareness advice. However, the lessons learned by children go further. School lessons are active, requiring activity and involvement of children, whereas community awareness campaigns are primarily passive, placed before people but requiring no action unless heeded. Children are also in an active learning phase of their lives, generally wanting to learn, even if some pretend otherwise. The hazard education they learn as children, however partial or fragmented it may be, stays with them for life. Even more significantly children share their school learning and projects with their families, acting as reinforcers of the more passive community safety and mitigation messages. All members of the community share the hazard experience and consequent natural disaster. All of the community, adults and children, participate in each of the stages of a disaster. All are likely to be traumatised to some extent, so that the more education prepares people, especially children, the better prepared the community will be in future events, thereby enhancing resilience and mitigation.

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