

# Multiple disadvantage and major life events

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Many of the circumstances frequently used as measures of disadvantage are associated with worse social and emotional outcomes for children. However, this is generally due to the negative experiences or events such circumstances can trigger. For example, low income only has a negative impact if it leads to financial stress.

The article 'Major life events' in Part A showed that Indigenous children experience more of these events, and have much higher levels of social and emotional difficulties, than non-Indigenous children. This analysis examines the relationship between the experience of major life events and children's social and emotional outcomes.

A 'major life event' is any event that can have a substantial impact on a person's wellbeing (Wilkins & Warren 2012). While these types of events are not necessarily regarded as negative, unwelcome or unexpected, they are generally accepted as having an impact nonetheless. They may also be perceived differently by each member of the household. Some of these events—such as births, deaths and marriages—are related to the normal human life cycle while others—such as the loss of a job, leading to possible financial hardship or social isolation—can be regarded as environmental stressors.

A great deal of research, especially in the area of mental health, has been done on negative adult outcomes that have their origins in childhood (e.g. Green et al. 2010). However, if events that occurred during childhood can have a negative impact years after they occur, it is likely that they also had a negative impact at the time.

In the report *Deep and persistent disadvantage in Australia* (McLachlan, Gilfillan & Gordon 2013), the Productivity Commission notes that 'what distinguishes high-risk children from other children is not exposure to a specific risk factor but rather a life history characterised by multiple familial disadvantages'. The report also states that 'following the same people over a number of years is critical to understanding deep and persistent disadvantage' and that 'few [surveys] ask questions about ... critical life events' (McLachlan, Gilfillan & Gordon 2013).

As well as measuring children's social and emotional wellbeing, both the Longitudinal Study of Australian Children (LSAC) and *Footprints in Time* ask primary carers about the major life events they have experienced over the previous 12 months. Because these questions are asked in every wave, it is possible to examine the extent to which children are being exposed to these events, both individually and in combination. Note, however, that the number of times the type of event has occurred is not asked. Therefore it is only possible to analyse whether a child has experienced an event during a wave, but not how often that child has experienced it.

Zubrick and colleagues (2005) found that children in the Western Australian Aboriginal Child Health Survey (WAACHS) who had experienced up to two major life events during the previous twelve months had a 15 per cent chance of developing clinically significant social and emotional difficulties. This rose to 25 per cent for children who had experienced three to six major life events and 42 per cent for children who had experienced seven or more.

## Methodology

This analysis uses data from Waves 1 to 4 of both LSAC and *Footprints in Time*. The outcome variable for this analysis is the social and emotional difficulties score described in the previous article (see page 85).

WAACHS used a series of 14 questions upon which the findings of Zubrick et al. (2005) are based. While both LSAC and *Footprints in Time* also ask questions about the major life events families experienced during the previous year, the number of questions, the wording and the people being asked about mean that not all questions are directly comparable. The first step, therefore, is to create a comparable set of indicators. Table 53 compares the set of 12 variables developed from the two studies. The differing wording of the questions may have had an impact on the response rates.

**Table 53: Major life events in LSAC and Footprints in Time**

| LSAC  | Footprints in Time  |
|---|---|
| Pregnancy or birth of a baby to P1 or P2*                     | Pregnancy or birth of a baby to P1 or P2                            |
| Injury, illness or assault to P1 or P2                        | P1 or P2 has been badly hurt or sick                                |
| Injury, illness or assault to other close relative            | Other close family member has been badly hurt or sick               |
| Parent, partner or child died                                 | Death of a close family member or friend in the household           |
| Close family friend or another relative died                  | Death of a close family member or friend not in the household       |
| P1 or P2 lost their job                                       | P1 or P2 lost their job   |
| Had a major financial crisis                                  | Family had serious money worries                                    |
| Moved house in the last two years                             | Moved house in the last year  |
| Someone in the household had a drug or alcohol problem        | Someone in the household had a drug or alcohol problem              |
| Something valuable was lost or stolen                         | Someone in the household has been mugged, robbed or assaulted       |
| P1 or P2 had problems with the police and a court appearance  | P1 or P2 has been arrested, in jail or had problems with the police |
| Separated from spouse or partner                              | Any of the child's carers left because of a family split            |
| *P1= primary carer; P2=secondary carer (usually P1's partner) |   |

LSAC interviewing only takes place every two years, and *Footprints in Time* interviews take place annually. However, in both studies, the questions (except for the LSAC question about moving house, see below) relate to events that took place during the 12 months prior to interview.

One of the greatest differences is in the questions identifying whether a family member was the victim of a crime: the *Footprints in Time* question has a stronger emphasis on being the victim of personal violence whereas the LSAC question deals more with property loss. In LSAC, the event relating to personal violence has been included in the question about illness.

In relation to housing, LSAC families were asked if they had moved in the last two years. The *Footprints in Time* question about housing includes problems with the house itself, and overcrowding, as well as whether the family has moved. These three elements were not addressed separately until Wave 4. Therefore, in order to make the questions in the two studies more comparable, the data for *Footprints in Time* is derived from a different question about whether the study child is living at the same address as the previous interview, rather than the major life events question.

In Wave 1 of LSAC, the younger cohort was not asked about pregnancy or the birth of a baby, or about whether the family had moved house, as the children were only 6 to 18 months old at

the time. These questions were, however, included for the *Footprints in Time* children as they were older at the time of the first wave.

The resulting sets of 12 major life events are reasonably comparable and, with the exception of pregnancy, birth and moving house, were included in both surveys in all four waves. However, it should be borne in mind that the different wording of the questions in the two studies may be responsible for some of the differences in results.

## Results—major life events

Tables 54 and 55 show the percentage of major life events experienced in each wave by children present in Wave 4. The number of major life events has been divided into two categories; ‘low’ for two or fewer events in one year, and ‘high’ for three or more. Zubrick and colleagues divided the second category further, into ‘medium’ for three to six events and ‘high’ for seven or more. However, as previously noted, 14 events were included in the WAACHS analysis. Only 12 have been used in this analysis, and the numbers experiencing 7 or more are very low. Both LSAC and *Footprints in Time* ask about other major life events that have not been included here, as they are not available in both studies.

**Table 54: Prevalence of major life events by wave in LSAC, per cent**

| Wave | Low (0–2) | High (3+) |
|------|-----------|-----------|
| 1    | 92.8      | 7.2       |
| 2    | 90.7      | 9.3       |
| 3    | 93.5      | 6.5       |
| 4    | 86.8      | 13.2      |

**Table 55: Prevalence of major life events by wave in Footprints in Time, per cent**

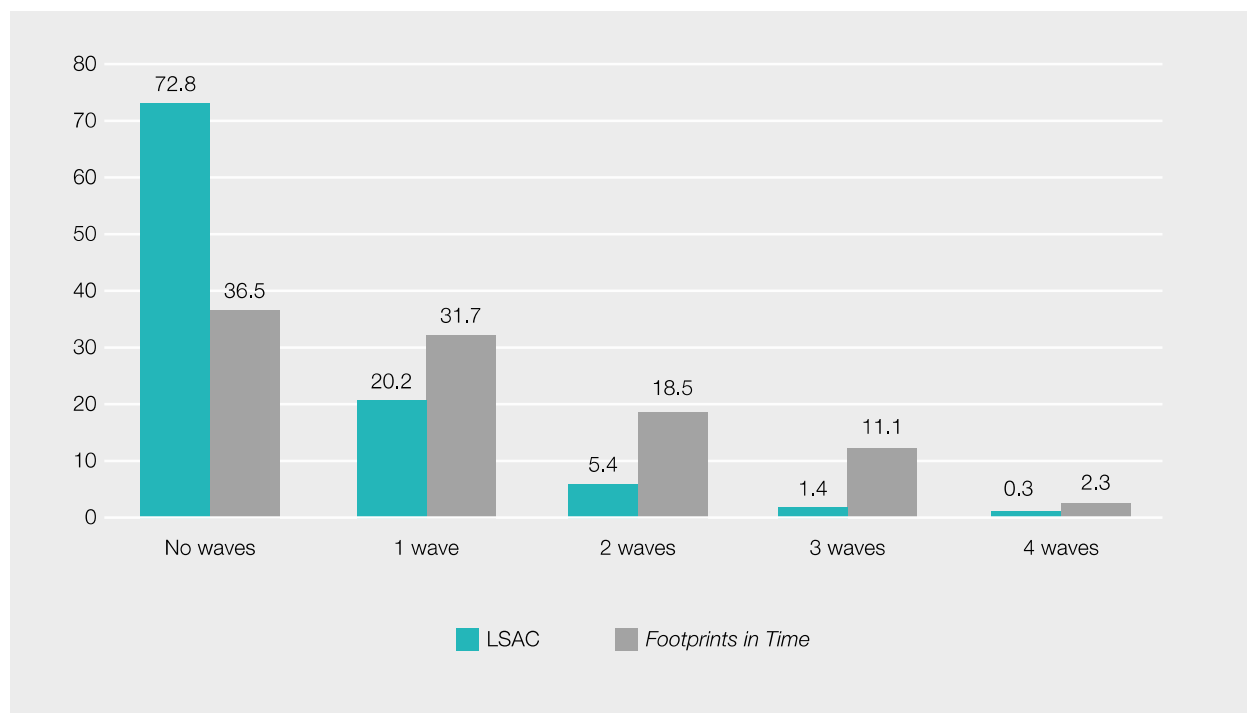
| Wave | Low (0–2) | High (3+) |
|------|-----------|-----------|
| 1    | 73.8      | 26.2      |
| 2    | 74.2      | 25.8      |
| 3    | 70.8      | 29.2      |
| 4    | 70.4      | 29.6      |

The tables show that *Footprints in Time* children experience a much higher number of major life events than LSAC children. Analysis using a broader range of event types has shown that around 10 per cent of children in *Footprints in Time* experienced seven or more major life events each year over three years (FaHCSIA 2012).

LSAC does show an increase in the percentage of children experiencing higher numbers of major life events in Wave 4, although this is still well below the level experienced by children in *Footprints in Time*. There is no clear reason for this increase; there are increases in about half the events across the years but generally these are not large. Further waves of data will help to determine whether this is an anomaly or the beginning of a trend.

Figure 11 shows the experience of multiple major life events over time. It shows the proportion of children experiencing three or more events by the number of waves, and highlights the fact that—as well as experiencing more major life events in each year—proportionately more children in *Footprints in Time* are experiencing high numbers of events on an ongoing basis.

**Figure 11: Experience of three or more events by number of waves, per cent**



**Tabular version of figure 11**

| Number of waves | LSAC | Footprints in Time |
|-----------------|------|--------------------|
| 0               | 72.8 | 36.5               |
| 1               | 20.2 | 31.7               |
| 2               | 5.4  | 18.5               |
| 3               | 1.4  | 11.1               |
| 4               | 0.3  | 2.3                |

Nearly three-quarters of the LSAC children experienced no more than two events in any of the four years and only 0.3 per cent experienced three or more events in each year. In contrast, just over one-third of the *Footprints in Time* children were in the ‘low’ category in each year and 2.3 per cent experienced three or more events in each year.

## Results—effects of major life events on children’s social and emotional outcomes

The results reported above show that Indigenous children have higher social and emotional difficulties scores and experience high numbers of major life events over a sustained period of time. This next section examines whether the experience of specific and multiple major life events is associated with increases in social and emotional difficulties, as measured by the ‘Strengths and Difficulties Questionnaire’ (SDQ) (Goodman 2012).<sup>1</sup>

A bivariate regression model of the number of waves in which three or more events were experienced against social and emotional difficulties scores found that:

- LSAC children who experienced three or more events in one wave had average social and emotional difficulties scores 1.2 points higher than those who had never

<sup>1</sup> For more information about this measure, refer to Appendix B.

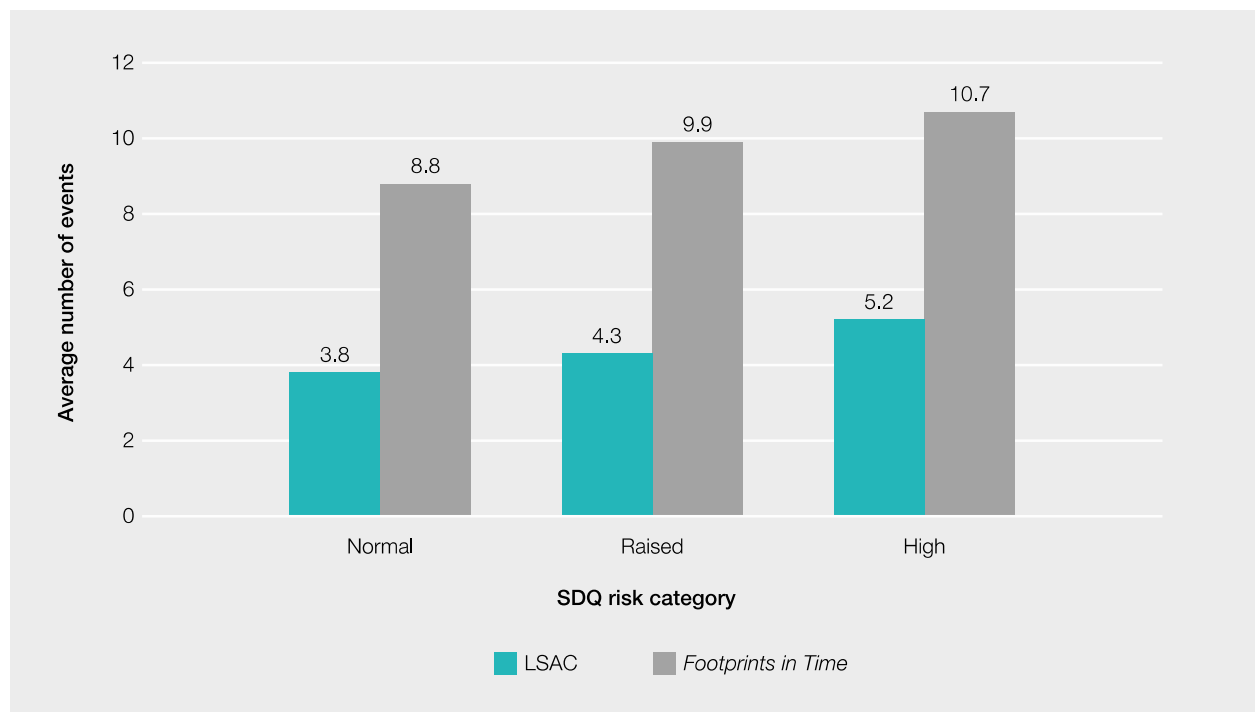
experienced three or more events, and those who experienced three or more events in two or more waves had average scores 2.6 points higher.

- *Footprints in Time* children who experienced three or more events in any number of waves (i.e. one or more) had average social and emotional difficulties scores 2.1 points higher than if they had never experienced three or more events.

Figure 12 shows the average number of major life events experienced across the four waves by children's likelihood of developing social and emotional difficulties as measured by the total difficulties score categories in Wave 4.<sup>2</sup> Children who have higher total difficulties scores have experienced higher average numbers of major life events. There is no statistical difference in *Footprints in Time* between the 'raised' and 'high' risk categories, but these two categories combined are statistically different from the 'normal' category ( $p < 0.001$ ). For LSAC, all three risk categories are statistically different. In all three risk categories, the average number of events experienced by *Footprints in Time* children is higher than for LSAC children. However, regardless of the starting point, an increase in major life events is associated with an increase in average social and emotional difficulties scores for children in both studies.

One of the most interesting results of this analysis is that when numbers of events experienced are converted into a proportion of the events that could have been experienced, it can be seen that a 1 per cent increase in experience of major life events over the four-year period was associated with a 0.169 point ( $p < 0.01$ ) and 0.167 point ( $p < 0.01$ ) increase in social and emotional difficulties scores for children in LSAC and *Footprints in Time* respectively. This suggests that an increase in major life events is associated with the same magnitude of increase in social and emotional difficulties for both groups.

**Figure 12: Average number of major life events over four waves by SDQ risk categories**



<sup>2</sup> The 'normal' category for SDQ includes scores of 13 or below. The 'raised' category includes scores of 14 to 16 and the 'high' category includes scores of 17 or above.

**Tabular version of figure 12**

| SDQ risk category | LSAC | Footprints in Time |
|-------------------|------|--------------------|
| Normal            | 3.8  | 8.8                |
| Raised            | 4.3  | 9.9                |
| High              | 5.2  | 10.7               |

## Results—impact of primary carer’s mental health

While the average social and emotional difficulties scores of children increase with a higher experience of major life events, there are some children who have experienced high numbers of major life events but do not have high difficulties scores. This may be due to a number of factors, including those inherent to the child—such as personality type and resilience. It is also likely that some external factors can have an offsetting, or positive, effect. This analysis examines the impact of the primary carer’s mental health in offsetting the impact of high numbers of major life events.

Primary carer’s mental health in LSAC is measured using the Kessler 6 scale. It consists of six questions about how the person has been feeling over the previous four weeks, and provides a continuous score of between one and five. The questions are:

### In the past 4 weeks, how often did you feel:

1. Nervous?
2. Hopeless?
3. Restless or fidgety?
4. That everything was an effort?
5. So sad that nothing could cheer you up?
6. Worthless?

Primary carer’s mental health in *Footprints in Time* is measured using a series of seven questions with a reference frame to the previous three months. Each question is measured on a four-point scale with a possible total score range between 0 and 21, with higher scores reflecting better mental health. The questions are:

### In the last three months

1. Have you stopped liking things that used to be fun?
2. Have you felt like everything is hard work (even little jobs are too much)?
3. Felt too lazy to do anything?
4. Have you ever felt so worried that your stomach has got upset?
5. Have you ever felt so worried it was hard to breathe?
6. Do you get angry or wild real quick?
7. Have you felt so sad that nothing could cheer you up?
8. Not even your friends made you feel better?
9. Do you do silly things without thinking that you feel ashamed about the next day?

Given the different wording of the two measures, is it appropriate to use them to compare the effect of the primary carer’s mental health on outcomes for the two different groups of children? Conceptualizations and experiences of mental health have been internationally recognized as being strongly influenced by culture. The experience of disorders and depression are universal but the triggers, symptoms and understanding of these disorders vary among cultures (Thomas et al. 2010). However, while essentially measuring social and emotional wellbeing, the different

measures do take account of the cultural differences that exist for most respondents in each group. Additionally, the measures are not used to compare the two groups, but only to compare respondents within each group. Therefore, the differences between the measures used in the two studies should not invalidate the results of the analysis.

For this analysis, primary carers' mental health scores have been divided into three approximately equal groups or terciles. Note that primary carers in the bottom third do not necessarily have poor mental health; it is simply poorer in comparison with the other respondents in the sample. Due to the relatively small spread of mental health scores (the majority fall between 4 and 5 on a scale of 1 to 5), it is not possible to split the sample into equal thirds, and the relative size of the terciles in each of the studies is not exactly the same.

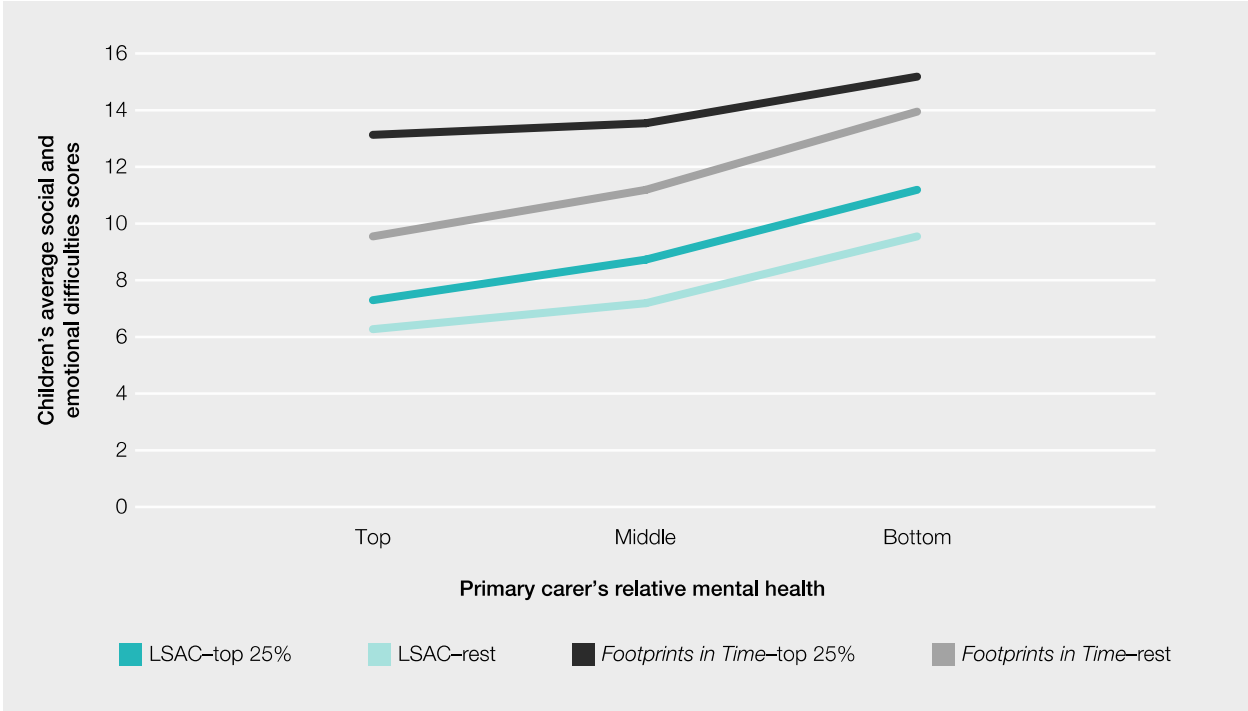
**Table 56: Average difficulties scores by primary carer's mental health tercile**

| Mental health | LSAC  | Footprints in Time |
|---------------|-------|--------------------|
| Top           | 6.55  | 10.12              |
| Middle        | 7.64  | 11.94              |
| Bottom        | 10.35 | 14.46              |

Table 56 shows an inverse relationship between primary carers' mental health and the children's average difficulty scores. That is, the average difficulties scores increase as the primary carer's (relative) mental health score decreases.

Figure 13 compares the difference in the average social and emotional difficulties scores of children by the primary carer's mental health according to whether or not they are in the top 25 per cent in terms of their experience of major life events, for each of the studies.

**Figure 13: Average difficulties scores by primary carer's mental health grouped by level of major life events experienced**



**Tabular version of figure 13**

| Level of major life events | Top  | Middle | Bottom |
|----------------------------|------|--------|--------|
| LSAC – top 25%             | 7.3  | 8.7    | 11.2   |
| LSAC – rest                | 6.2  | 7.2    | 9.6    |
| LSIC – top 25%             | 13.1 | 13.5   | 15.2   |
| LSIC – rest                | 9.5  | 11.2   | 14.0   |

The same pattern is observed for children in both the bottom three quartiles of major life events experienced and the top quartile; that is, as the primary carer’s mental health improves, children have lower average difficulties scores. While children surveyed in *Footprints in Time* have higher social and emotional difficulties scores than the children in LSAC, the results are the same: within each group, children whose mothers have better mental health have comparatively better social and emotional outcomes.

## Results—changes over time

The analysis so far has focused on the social and emotional difficulties scores from Wave 4, but there are scores for Waves 3 and 4 for both studies. Previous analyses in this article examined the cross-sectional relationships between variables, identifying statistical significance and the size of effect related to the number of major life events experienced and the primary carer’s mental health. However, this kind of analysis does not deal separately with differences in results between children and changes over time for the same child. Using Allison’s hybrid modelling technique (Allison 2009), it is possible to examine separately the extent to which children’s difficulties scores vary both between children and for each child from one time point to another. This technique can therefore be used to address the question of whether or not a child’s difficulties score will increase if they experience more life events, or will increase or decrease with changes to their primary carer’s mental health. For this analysis, children who did not have the same primary carer in both waves were not included.

**Table 57: Changes in difficulties scores between children and for children over time**

|                    |                  | LSAC    | Footprints in Time |
|--------------------|------------------|---------|--------------------|
| Between children   | Number of events | 0.45**  | 0.71**             |
|                    | P1 mental health | -3.02** | -2.52**            |
| Children over time | Number of events | 0.03    | 0.08               |
|                    | P1 mental health | -1.05** | -1.59**            |
| **p<0.05           |                  |         |                    |

Table 57 shows that for an individual child in *Footprints in Time*, an increase of one point in their primary carer’s mental health score from one year to the next decreases their difficulties score by an average of 1.59 points. Between children, however, the average decrease is larger (2.52). While supporting what we found earlier—that, in general, children experiencing more major life events had higher social and emotional difficulties scores—the hybrid model shows that there is no significant change for individual children from one year to the next. That is, a child experiencing a higher number of events from one year to the next will not have a worse score. As noted previously, this is possibly due to inherent personal characteristics such as resilience. However, this result could change with data over more time points. It seems likely that sustained increases or decreases in major life events will be significantly associated with changes in difficulties scores.



## Conclusion

The generally used measures of disadvantage only showed a significant relationship to social and emotional outcomes for non-Indigenous children. However, the relationship between major life events and children's social and emotional development was significant for both Indigenous and non-Indigenous children in the *Footprints in Time* and LSAC samples respectively.

The link between circumstances and events became evident when the LSAC and *Footprints in Time* children were compared. *Footprints in Time* children not only experienced higher levels of disadvantage, but they also experienced higher levels of major life events. These in turn translated to overall higher social and emotional difficulties scores. However, children in both studies who experienced more events had higher average difficulties scores. As the relative impact of additional events was the same across both groups of children, and the *Footprints in Time* children experienced much higher proportions of events, this suggests that the higher social and emotional difficulties scores experienced by *Footprints in Time* children do not arise from higher levels of disadvantage but are due to living with higher numbers of major life events.

Good mental health of the primary carer seems to be a protective factor for children's social and emotional development, and acts as a buffer for those children experiencing multiple major life events. While good mental health by itself cannot overcome the negative effect of multiple disadvantage, there is a clear suggestion that safeguarding parental mental health would provide a significant contribution towards achieving better social and emotional development and outcomes.

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