ABSTRACT
This study used the Sustainable Livelihoods Framework (SLF) to analyze the lived experiences of 13 women in Brisbane, Australia, striving for food security. Data analysis identified two key themes and four sub-themes about the ‘trade off’s made by women managing food insecurity. The two key themes were resilient pragmatism and coping pragmatism, which both included sub-strategies to minimize damage to social identity and self-identity. Participants applied a pragmatic, cascading decision-making process based on their need for social acceptance and inclusion, as opposed to nutritional adequacy. Coping strategies were found to be adaptive, based on resilient pragmatism aimed and protecting identity.

KEYWORDS
Household food insecurity; coping; resilience; livelihoods; pragmatism

Introduction
Food and nutrition security is defined by the Food and Agriculture Organization (FAO) as existing when “all people at all times have physical, social and economic access to food, which is safe and consumed in sufficient quantity and quality to meet their dietary needs and food preferences, and is supported by an environment of adequate sanitation, health services and care, allowing for a healthy and active life” (Food and Agriculture Organisation, 2012, p. 5). Thus, food insecurity is the limited or uncertain availability or access to nutritionally adequate, culturally appropriate and safe foods or limited or uncertain capacity to obtain adequate food in a socially acceptable manner (Bickel et al., 2000; Tarasuk, 2001). Access to a safe and nutritious food supply is not only a fundamental determinant of health, but a basic human right, yet it is often compromised both at the household and community level in low, middle and high-income countries (Chilton & Rose, 2009; Dowler & O’Connor, 2012).

Australia is considered to have a strong, safe and stable food system and is generally considered to be food secure (Nolan et al., 2006). However, as in
other high-income countries, there are regions and population sub-groups for
which household food security is a major concern (Brown & Tarasuk, 2019;
Middleton et al., 2018; Ramsey et al., 2012). Nationally the prevalence of food
insecurity for persons over the age of 18 years in Australia, was estimated at
4% in 2011 (Australian Bureau of Statistics, 2015). However, the single-item
tool used has been shown to under-report food security by between five and
eight percentage points when compared against validated multi-item tools
(McKechnie et al., 2018). Population-based surveys may also underrepresent
vulnerable subgroups who may experience higher levels of food insecurity
(Booth & Smith, 2001). While these multi-item tools measure the prevalence
of food insecurity, they do not necessarily measure diet quality, the con-
tributing factors, or what strategies are engaged to minimize the impact
(Stevens, 2010).

Populations within Australia that appear to be more vulnerable to food
insecurity include Aboriginal and Torres Strait Islander households (24%)
(Browne et al., 2009), refugees and asylum seekers (70–100%) (Gallegos
et al., 2008), the unemployed (23%) (Booth & Smith, 2001), single-parent
households (23%) (Booth & Smith, 2001), low-income earners (20%) (Booth
& Smith, 2001), households that are renting (20%) (Booth & Smith, 2001) and
young persons (15%) (Booth & Smith, 2001). Studies have demonstrated the
prevalence of food insecurity is significantly higher in very low-income
groups, where the root cause is poverty (Booth & Smith, 2001). However,
recent evidence indicates middle-income households, experiencing financial
stress, also have an increased prevalence of food insecurity (Kleve et al., 2017).

Various studies have identified that the most severe level of food insecurity
occurs in households in which children’s nutritional intake is compromised
(Nord, 2009). Dietary intake of children living in food insecure households
tends to be protected in the short to medium term by adults (predominately
female caregivers) adjusting their own dietary intakes (Coleman-Jensen et al.,
2013; Dietitians of Canada, 2016; Harvey, 2016). In high-income countries,
发病率households with children are likely to experience physical hunger but
diet quality may be more likely to be comprised to ensure regular consumption
of enough food (Kleve et al., 2017; Ramsey et al., 2012). Reducing variety and
quality of food has been cited as a common strategy engaged by households
that are worried about running out of food, in an attempt to avoid hunger
(Kleve et al., 2017; Ramsey et al., 2012).

Regardless of the duration of food insecurity, studies in high-income coun-
tries have shown an association between this phenomenon and an increased
incidence of chronic non-communicable disease and in some instances, an
exacerbation of existing diseases (Food Research & Action Center, 2017;
Gregory & Coleman-Jensen, 2017). Evidence demonstrates that food insecur-
ity and obesity are positively correlated amongst women residing in food
insecure households (Franklin et al., 2012; Sanjeevi et al., 2018) due to the
consumption of low-cost, energy-dense foods when finances are restricted (Dinour et al., 2007; Sanjeevi et al., 2018) or cyclical eating patterns whereby individuals overeat to counteract periods of insufficiency associated with food insecurity (Franklin et al., 2012). Furthermore, compromised nutritional intake is associated with poor health, cognitive and motor delays and emotional difficulties in infancy and childhood irrespective of food insecurity status (Hernandez & Jacknowitz, 2009; Rosie, 2011).

Food insecurity is commonly classified as being either chronic or transitory (Food and Agriculture Organisation, 2008; Hart, 2009). Chronic food insecurity is defined as persistent and predictable pressure over an extended period that causes stress, while transitory is considered temporary and relatively unpredictable as a result of a shock (CARE, 2002; Food and Agriculture Organisation, 2008; Hart, 2009). Characteristically, shocks are sudden, unpredictable and often traumatic events that impact on a household’s available resources. However, household food insecurity is not a static condition and households may alternate between chronic and transitory food insecurity and experience different levels of severity of food insecurity (Food and Agriculture Organisation, 2008; Hart, 2009). Studies have demonstrated that in many low to middle-income households food availability, quantity and quality is cyclical, based around the household income cycle with expenditure on food significantly higher when income is available (Laraia, 2013). However, toward the end of the income cycle, there is a significant decrease in the quantity and quality of food due to competing fixed expenditures which are often prioritized (Laraia, 2013).

Food security has been identified as a “managed process”, consisting of a complex and foreseeable distinct pattern of events, or coping strategies, that result in households altering their behavior by engaging strategies to minimize or avoid an actual food crisis (Maxwell et al., 2008). The World Health Organization (WHO) defines coping strategies as “remedial actions undertaken by people whose survival and livelihood are compromised or threatened” (WHO/EHA, 1998). In most instances, households will engage in a series of well-documented coping strategies in the initial stages of food insecurity (Burns et al., 2013; Nolan et al., 2006). However, when engaged frequently, these strategies tend to become adaptive as they are normalized within the household routine (Michalski, 2003). Evidence indicates that strategies used by households in times of financial constraint tend to comprise food and non-food based techniques (Maxwell et al., 2008). Dietary strategies employed may include changing food quality by acquiring energy-dense but nutrient-poor, low-cost food items, limiting fruit and vegetable consumption, rationing infant formula and forgoing foods related to special medical dietary requirements (Ahluwalia et al., 1998). Non-food based strategies may include selling assets along with deferring bill payments to purchase food (Maxwell et al., 2008; McCrindle Research, 2017). The extremity of the coping strategy
engaged as a measure of compensation is proportional to the household's perceived or actual level of vulnerability, the greater the level of vulnerability the more drastic the compensating strategy engaged (Maxwell et al., 2008; Mayer et al., 2015).

Household income determines what resources are available for dietary intake, considering other competing commodities (Hoddinott, 2014). However, income distribution is impacted by the likelihood of a household experiencing adverse stressors and shocks. The coping strategies engaged to manage these potential setbacks will determine the household’s level of resilience (Bene & Haddad, 2013; Hoddinott, 2014). Resilience is “the capacity over time of a person [or] household . . . to avoid poverty in the face of various stressors and the wake of myriad shocks. If and only if that capacity is and remain high over time, then the unit is resilient” (Upton et al., 2016, p. 140). Evidence highlights that a person’s resilience imitates their individual traits accompanied by a supportive, nurturing environment (Hoddinott, 2014). The concept of household resilience focuses on the broader environment in which a household exists; availability of resources; how households utilize those resources; how economic returns on resource utilization are impacted by shocks experienced by households; and how the use of resources contributes to the consumption of food and other goods and services; savings; and health and nutrition status (Hoddinott, 2014). How households allocate and engage these resources to maximize income and minimize the risk of shocks is often alluded to as the household’s livelihood strategy (Hoddinott, 2014). The balance between income and competing daily living expenses consists of various trade-offs for a household to survive (Food Research & Action Center, 2017). However, to remain resilient, a household must be adaptive by learning from experiences and adjusting to changing conditions accordingly (Hoddinott, 2014).

Within the Australian context, there is limited research that examines the rationale behind the coping strategies engaged and associated trade-offs about prioritizing food purchasing over other competing demands. This paper explores how households within a metropolitan area of an Australian capital city adjust to minimize exposure to food insecurity.

**Methods**

**Theoretical framework**

The Sustainable Livelihoods Framework (SLF) was adopted as the theoretical lens to explore the lived experiences of how, given diverse contexts, households manage to preserve their livelihood when confronted with shocks and stresses and the implications for food security. The SLF identifies characteristics that constrain or enhance livelihood opportunities and examines any
inter-relationship (Bene & Haddad, 2013; Krantz, 2001). The relationship between sustainable livelihoods and food security is multifaceted, and influenced by a variety of factors that vary in significance across contexts and over time (Woller, 2009). The SLF is underpinned by two key dimensions: equity and sustainability (Slater & Yeudall, 2015). Equity denotes a reasonable distribution of (a) capabilities; (b) assets, and (c) opportunities (Slater & Yeudall, 2015). Capabilities by definition refer to a person’s ability to achieve what they have reason to value and the freedom to make informed choices through access to education, resources and social services to achieve a decent standard of living, and be an active, healthy member of society (Jacobson, 2016). Sustainability is determined by how assets and capabilities are employed, maintained, and optimized to preserve livelihoods (Slater & Yeudall, 2015).

Broadly, livelihood resources can be categorized into either time, which relates to a person’s availability to work, or capital (Hoddinott, 2014). Capital assets consist of those with the ability to produce income, such as: physical and financial resources; human capital, which includes formal schooling and knowledge; and an individual’s health and nutrition status in relation to their physical ability to work (Bene & Haddad, 2013; Hoddinott, 2014).

Understanding, how different livelihood resources are sequenced and combined in the pursuit of different livelihood strategies is therefore critical. Deciphering the relationships between such complex and dynamic processes along with the outcomes of various combinations of strategies is pivotal to any investigation of sustainable livelihoods (Scoones, 1998). The SLF assumes that households operate within the context of vulnerability. Vulnerability refers to a household’s probability of future acute loss and its ability to preserve its livelihood and food security at a future point in time (Maxwell et al., 2000). The relationship between livelihood security and food security is considered to be bi-directional: that is the greater the share of resources devoted to food and health service acquisition, the higher the vulnerability of the household to food and nutritional insecurity (CARE, 2002; Woller, 2009). The SLF was used to inform the interview questions and applied deductively to analyze the participants’ lived experiences.

**Participants**

Participants were women living with children within the greater Brisbane area. Women were recruited from emergency food relief (EFR) agencies (pantries, food banks), community organizations supporting women, food co-operatives, and via a snowballing technique. Snowball sampling is a qualitative research sampling technique that is effective in recruiting participants from vulnerable populations for research on sensitive issues (Naderifar et al., 2017). Women who had participated in other social...
research who had agreed to be contacted were also approached to participate. Before each interview commenced, each participant provided informed consent, completed a short demographic survey and the USDA six-item short-form questionnaire (Bickel et al., 2000) to ascertain food security status.

Selected social demographics of the thirteen participants and their households are shown in Table 1. The participants represented a diverse range of household types (single-parent and couples with children), ages, and education, allowing for greater insight into the strategies engaged in managing food security across a range of contexts. Two of the women identified as Indigenous.

**Interviews**

Interviews were part of a longitudinal qualitative study in which participants undertook three semi-structured interviews over 18 months. The interviews were either face-to-face or via telephone and 30 to 45 minutes in duration. This paper reports the initial baseline interviews carried out in 2016. The interviews explored what strategies women engaged to ensure food security and how such strategies impacted upon the household. An open-ended interview question guide was developed using the literature and was informed by the SLF. A series of sample interviews was undertaken with women who volunteered who may or may not have been food insecure. The questions were refined by all authors after the pilot interviews. Examples of indicative questions are provided in Table 2.

While a set of open-ended questions was used as a guide, questioning was flexible, and departures were encouraged, which enriched the interview data. All participants were offered an opportunity to enter a draw to win an iPad as compensation for their time.

| Participant | Age | # Children | Single Parent | # Person Employed | Post-secondary Education |
|-------------|-----|------------|---------------|-------------------|--------------------------|
| P1          | 46  | 1          | Y             | 0                 | Degree                   |
| P2          | 42  | 1          | Y             | 0                 | Degree                   |
| P3          | 67  | 1          | N             | 1                 | None                     |
| P4          | 37  | 2          | N             | 2                 | Degree                   |
| P5          | 37  | 1          | Y             | 1                 | None                     |
| P6          | 33  | 3          | N             | 1                 | Trade                    |
| P7          | 32  | 2          | N             | 2                 | Trade                    |
| P8          | 40  | 2          | N             | 2                 | Degree                   |
| P9          | 34  | 2          | Y             | 0                 | Trade                    |
| P10         | 43  | 2          | N             | 1                 | Diploma                  |
| P11         | 55  | 2          | N             | 2                 | Degree                   |
| P12         | 48  | 2          | Y             | 1                 | Degree                   |
| P13         | 40  | 2          | N             | 1                 | Diploma                  |
Table 2. Indicative questions using the SLF.

| Livelihood Assets | Indicative Questions |
|-------------------|---------------------|
| Human capital     | When you have struggled to have enough food what have you done? |
|                   | ● Skipped meals |
|                   | ● Borrowed food |
|                   | ● Budgeting |
|                   | ● Work and extra job or cash incentives |
| Financial capital | Talk me through your household’s management of money |
|                   | ● Source of income? |
|                   | ● What gets priority? |
|                   | ● Types of household expenses? |
|                   | ● Use of credit? |
|                   | ● Sold household items? |
| Social capital    | How do you feel about approaching formal Emergency Food Relief agencies for food? |
|                   | ● Steps taken prior to accessing agencies |
|                   | ● How did accessing agency make you feel |
|                   | ● How do you manage special occasions such as Christmas and birthdays? |
|                   | ● Don’t celebrate |
|                   | ● Family friends |
| Physical capital  | Can you walk me through what strategies you use on a regular basis to have an ensured supply of food? |
|                   | ● Transportation/petrol |
|                   | ● Mobile phone/internet |
|                   | ● Personal expenses |

Qualitative rigor

Before the first interview, the first author piloted the questions in interviews and used these to reflect the interview style. Questions and approaches questions were reviewed by the research team. Field notes that remarked on the interviewer responses and thoughts as well as other points about the progress of the interview, were made after each interview. These notes were used in addition to a debriefing process with the other two authors. This reflective process allowed for necessary changes to be made to minimize the risk of leading questions, and acknowledge and minimize researcher bias.

There was awareness around the potential for participant response bias due to the stigma associated with food insecurity and the interviewer being a dietitian. To minimize bias, the interviewer allowed time to introduce and discuss the research aims, objectives, and guarantee confidentiality building trust and understanding of the objectives of the study, resulting in more detailed interviews.

As with any qualitative research there is a need to acknowledge the researchers’ own positions and interest, which are imposed at each phase of the research process (Finlay & Gough, 2003). The researcher is pivotal in the collection, selection and interpretation of data however, research is co-constituted with participants, the research itself and the relationships formed (Finlay & Gough, 2003). As a dietitian, a mother, and a person with lived experience of household food insecurity, the interviewer was aware of the sensitive and emotional responses that the interview could evoke. To ensure participants’ comfort and to reduce the likelihood of the questions causing
more distress, each participant was instructed they could pause, cease or choose to skip a question.

**Data analysis**

Framework analysis was adopted due to its explicit approach to qualitative analysis and because it sits within the broad group of thematic methodologies (Gale et al., 2013; Ward et al., 2013). Thematic analysis seeks to identify patterned themes across a dataset which provides a descriptive and/or explanatory interpretation of the data (Gale et al., 2013). Framework analysis uses a robust and comprehensive method that engages a systematic, interconnected staged approach to an analysis of raw data that explains and enhances the understanding of social behavior (Furber, 2010; Smith & Firth, 2011). The framework approach offers transparency in the analysis process as it enables others to review the stages undertaken in developing the final interpretation (Furber, 2010; Ward et al., 2013). All seven stages of the framework approach were used (Gale et al., 2013).

As part of the framework methodology, all transcripts were independently reviewed and inductively coded by two of the authors (RD, DG) to identify any relevant analytical notes, thoughts or impressions (Gale et al., 2013; Ward et al., 2013). Any variation or dissonance in coding was discussed until consensus was reached. Reviewing and coding of data by two independent authors offers the opportunity to explore alternative viewpoints, thereby minimizing the impact of personal viewpoints on the outcomes (Gale et al., 2013). All coded and categorized interview transcripts were uploaded into Dedoose (Version 8.1.8, 2018) for management, analysis, and the presentation of qualitative research data using the framework matrix (Gale et al., 2013). All members of the research team then applied the SLF to deductively explore the concepts to develop the themes and map categories to investigate relationships. The COREQ checklist has been used to report this research (Supplementary material).

**Ethical approval**

The study was approved by the Queensland University of Technology Human Research Ethics Committee (# 150000098). All participants provided informed written consent.

**Results**

After the inductive and deductive analysis, two primary themes with four sub-themes were identified (see Table 3). Each of these themes is explored in more detail below. Fundamental to these themes are the strategies engaged by the households to manage food insecurity.
Resilient pragmatism

Analysis of the data highlighted that the participants employed pragmatic strategies to survive the current situation with the belief that they were short-term measures. However, in some instances, these pragmatic decisions appeared to impact on the household’s ability to be resilient in the long-term.

(1) Strategies that enhance household resilience

This sub-theme recognized that in the first instance households employed strategies perceived to protect their asset base to survive a temporal economic shock. When faced with compounding financial hardships and limited income, participants applied well-documented coping strategies; however, it was the pragmatic decision-making processes that provided them with a sense of resilience to weather the temporal economic shock. Strategies engaged included prioritizing the payment of housing and utility expenses, using credit, changes in nutritional composition, along with budgeting strategies. Regardless of the strategies engaged it was the either the emotional detachment of participants and/or their acceptance of the trade-offs required, which made the decision-making process pragmatic. This is exemplified in the following quotes:

Prioritise what we really need against what we have, against the money that’s available. [P9]

I don’t feel that food is a priority well it is if you haven’t got any but to me paying

those bills are because I know I always have backups in my pantry and if need be I can make a meal out of rice or whatever. [P3]

Money won’t stretch no matter how hard I try, we just don’t do stuff we don’t go out. I feel scared, vulnerable and I’m more inclined to stay inside not consuming anything food wise or energy wise or petrol wise as wherever you go it costs money and if you take a child with you it costs more money. [P1]

Strategies that harm household resilience

Most participants identified the use of specific strategies that demonstrated their ability to be resilient. The success or otherwise of employing these strategies was determined by the duration and severity of the stress or

---

| Themes Pragmatism       | Sub-Theme                                      |
|-------------------------|-----------------------------------------------|
| Resilient Pragmatism    | ● Strategies that enhance adaptive household resilience |
|                         | ● Strategies and trade-offs that harm household resilience |
| Coping Pragmatism       | ● Strategies that minimize damage to social identity |
|                         | ● Strategies that harm self-identity to maintain social identity |

---

---

Table 3. Themes identified after inductive and deductive analysis using the SLF.
shock. Participants preserved their assets with a range of strategies to protect their future livelihood until the point of destitution. However, there were tipping points at which time the strategies meant that the household had to make sacrifices, diminish assets, and relinquish valued items. For example:

We’ll have to make some decisions about whether we sell our house or whatever. [P11]

When I stopped working, I would use the credit card until there was no more money to meet the minimum repayment and the credit card actually gets cancelled so you’re still making minimum repayments but can’t use the credit card any more. [P1]

… pawned some of his tools, his work tools. [P4]

(1) Coping Pragmatism

The strategies engaged by these women, minimized harm to their social identity to preserve their standing within their community. Social identity is constructed by interaction with others and underpinned through learned experiences; behaviors and communication within and individuals local community (Hudson, 2016). However, over time, maintaining social identity ultimately resulted in harming self-identity. Self-identity refers to beliefs and values an individual holds to be true about oneself, which interacts with self-esteem, self-knowledge and their social self (Ellemers et al., 2002). Human beings have a basic need, not only to belong, but to be connected to the local community and, as such, will protect how the outside world perceives them to avoid social rejection and stigmatization (Hudson, 2016).

Strategies used to minimize social identity

In this sub-theme, we identified strategies that focused on minimizing harm to social identity, which is the outward facing view that the world witnesses. The importance of maintaining social identity revolves around the concept of acceptance and the need to be seen as a valuable contributing member within the community setting. Maintaining the outward appearance of food security ensured the household was free from social judgment or being stigmatized as being “less than”, which the participants perceived as necessary to resilience. Strategies consisted of prioritizing that children were appropriately resourced for school, ensuring children could participate in activities, and reluctance to use agencies providing emergency food relief, such as:

We didn’t want the kids to miss out on having extracurricular activities. I tend to pull away from the full-on meals to cover the cost of their extracurricular activities. [P13]

He goes to school with a chocker box lunch box so he is never hungry at school. I’ve been hungry at school and it’s really sad. [P1]
Lovely, lovely but you get painted with the same brush and that’s what I didn’t like if that makes sense you know they look at you and go ooh you can’t afford food it’s the first time you’ve been here but you can’t afford it, yeah well, I can’t this week sorry. [P5]

Strategies that harm self-identity to maintain the social identity

This sub-theme recognized that strategies engaged by participants to maintain social identity resulted in sacrificing self-identity. Studies have shown that a person’s self-worth has a significant impact on how they engage within their local community, standing within their household, along with their mental health and well-being (Ellemers et al., 2002). To differing degrees, participants reported their self-worth to be lower than other household members or as being a less worthy member of their community as illustrated by:

Things I miss being able to go and buy new makeup or new underwear and feel feminine I feel rough and I feel not dirty but I feel less than . . . I feel like a hidden part of society and that we don’t want to be acknowledge as well. [P1]

I basically generally go without alcohol and things but <my partner> doesn’t he gets his box of beer on pay day and he smokes as well so it does become a bit of a grinding point sometimes particularly when food is getting in short supply and he needs a pouch of tobacco it gets a bit difficult to justify you need your tobacco but we need food. [P4]

I put myself second, and my husband and the kids come first because he works away, so he sacrifices already, so I don’t let him go without. [P13]

Discussion

There is significant literature documenting the various coping strategies households engage to minimize their exposure to food insecurity. This study demonstrates that, due to the repetitive use of these strategies, they become adaptive. Coping strategies, by definition, are compensating actions initiated in response to a shock or stress to survive and not intended for long term utilization (WHO/EHA, 1998). However, participants viewed crisis strategies as “common-sense trade-offs” used to remain resilient. As a result of routine application of strategies, some participants did not identify with being food insecure, as these actions resulted in their ability to put food on the table. This study concurred with previous research that household income is a pertinent factor in achieving nutritional adequacy, as food choices were initially based on affordability over food preferences and nutritional knowledge (Puddephatt et al., 2019). Additionally, various trade-offs were engaged to ensure the availability of sufficient food to avoid hunger (Bene & Haddad, 2013). Trade-offs in relation to nutritional adequacy do not negate participants’ awareness of nutritional quality, they were merely indicative that diet quality is reflective
of financial resources available for food procurement within the household budget.

Evidence shows women who employ trade-offs to manage household food insecurity against basic human needs experience emotional distress, shame, anxiety and a sense of resignation, which impact on their decision-making processes (Knowles et al., 2016). We found however, that participants tended to apply a pragmatic decision-making approach to remain resilient; a concept we have coined “resilient pragmatism”. Resilient pragmatism refers to the ability to adjust to crises or shocks in practical ways and encompasses a cascade of trade-offs to ensure the household has food. Resilient pragmatism was pursued regardless of nutritional adequacy to maintain assets, which participants perceived as crucial in disguising food insecurity and providing an image of resilience and a desirable social identity. This resilient pragmatism was a form of emotional disconnectedness by some of the women in that they purposefully emotionally detached themselves when they were engaging strategies to minimize their household’s exposure to food insecurity.

During crisis, individuals engage logical, everyday coping strategies to alleviate uncertainty (Ansell, 2017; Bechky & Okhuysen, 2011). In other words, a pragmatic approach is used to reduce uncertainty (Ansell, 2017). Pragmatism refers to the “practical and commonsensical way of behaving, characterised by flexibility and compromising to get things done” (Ansell, 2017) through practical rationality and problem-solving that addresses the crisis at hand (Ansell, 2017). Pragmatism offers a commanding and distinctive concept of practical rationality, and provides insight into how people improvise with what is available to achieve the best outcome in a given situation (Ansell, 2017). In this case, this pragmatic resilience did the “social work” to both alleviate a household’s exposure to food insecurity, and to protect social identity or public image.

This study highlights that participants had a heightened awareness of the need to protect how the outside world perceived their ability to conform to social norms. While it could be argued that, in line with other studies, children were protected at the household level from hunger, we found that the participants’ rationale focused more on the need to lessen or disguise their level of vulnerability within their communities. A common strategy used to achieve this objective was to prioritize lunchboxes to ensure they were not only full but contained similar items to what other children consumed. We also identified that participants’ past negative experiences around school life factored into prioritizing school lunches and the need to avoid their children being stigmatized. Stigmatization transpires when our social or self-identity does not imitate society expectations resulting inability to meet standards for a particular group (Hudson, 2016). Evidence shows that stigmatism has a negative impact on: a person’s mental and physical health due in part to social isolation; self-worth; ability to access necessary medical treatment; and
willingness to seek assistance from agencies (Martin et al., 2008). Adding to the complexity of social identity and stigmatism is that once a person is stereotyped it is difficult for them to overcome (Martin et al., 2008).

While the participants applied a series of pragmatic, common-sense strategies that, in the first instance, protected their social identity, these very same strategies cascaded into sacrificing self-identity as the severity and/or duration of the shock or situation increased or endured over time. Despite the negative impact of these trade-offs, participants perceived that adopting such strategies demonstrated resilience. They believed that sacrificing oneself in order to protect their children or primary earner enabled them to regroup, and in time, revert to being food secure. The underlying contributing factor for such practices focuses on society’s perceptions of normalized behavior and risk of social isolation as a result of being stigmatized (Martin et al., 2008). This reflects the historic socialization of women in which their health and social needs are often given lower priority within a family/household context (Beardsworth et al., 2002).

The necessity to maintain social identity saw participants prepared to sacrifice their own basic needs to hide their household burden which, in turn, impacted negatively on their self-identity. Cutting the size of – and skipping – meals, changing food preferences and making personal sacrifices were all used to maintain social identity. Participants reported that to ensure children attended private schooling or extra curriculum activities they were happy to sacrifice their own personal desires and needs however, these sacrifices had a negative impact on their self-worth and mental health which resulted in instances of reclusive behavior. Additionally, the reluctance to seek assistance from agencies providing emergency food relief also protected against the disruption to social identity. Accepting emergency food relief was perceived as invoking poverty, inferiority, vulnerability and less resilience.

**Limitations**

This is a qualitative study and as such cannot be generalized to all women in all contexts. It has however highlighted the deep impacts of food insecurity for some women living in Queensland. The sensitivity that surrounds food insecurity at the household level and the obvious stigma made recruitment to this study difficult which directly impacted on the number of participants. The women who were recruited were from diverse backgrounds including Aboriginal and Torres Strait Islander, however due to the language of the interview, data from culturally and linguistically diverse women were not captured.

**Conclusion**

These findings elucidate previously reported strategies engaged by households to minimize exposure to food insecurity and highlights the rational
and emotional processes households employ to appear resilient. This work highlights the complex interaction between coping and resilient pragmatism, as women developed adaptive strategies and trade-offs to protect self and social identity. It has been argued that households engage coping strategies when experiencing stress or shocks however, the reliance and frequency of engaging these strategies implies that they become adaptive strategies which in some instances disguise the households’ level of vulnerability and food security status. Regardless of the strategy engaged or the timing of engagement, participants applied a pragmatic approach to remain resilient from a social identity perspective. Further research into the longitudinal implications of these strategies will be reported as part of the current three phased study.

Acknowledgments

Thank you to all the participants in the study who gave up their time to take part in the research. We would also like to thank Sunshine Coast Christian Food Co-Op and The Centre For Women & Co. for assistance in recruitment to the study.

Author contributions

R. Dryland and D. Gallegos undertook initial research design. R. Dryland developed the interview questions, undertook data collection and transcription and led the thematic analysis of the data. D. Gallegos and JA. Carroll provided input into the application of the conceptual framework to the data analysis process and all authors confirmed the final themes. R. Dryland drafted the article and D. Gallegos and JA. Carroll provided writing input and editing. All authors have approved the final version.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

ORCID

Danielle Gallegos https://orcid.org/0000-0001-5901-1909
References

Ahluwalia, I. B., Dodds, J. M., & Baligh, M. (1998). Social support and coping behaviors of low-income families experiencing food insufficiency in North Carolina. *Health Education & Behavior: The Official Publication Of The Society For Public Health Education*, 25(5), 599–612. https://doi.org/10.1177/109019819802500507

Ansell, C., & Boin, A. (2017). Taming deep uncertainty: The potential of pragmatist principles for understanding and improving strategic crisis management. *Administration & Society, 51*(7), 0095399717747655. https://journals.sagepub.com/doi/full/10.1177/0095399717747655

Australian Bureau of Statistics. (2015). *Australian Aboriginal and Torres Strait Island health survey: Nutrition results - Food and nutrients, 2012-2013*. Australian Bureau of Statistics. http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4727.0.55.005~2012-13~Main%20Features~Food%20Security~36

Beardsworth, A., Bryman, A., Keil, T., Goode, J., Haslam, C., & Lancashire, E. (2002). Women, men and food: The significance of gender for nutritional attitudes and choices. *British Food Journal, 104*(7), 470–491. https://doi.org/10.1108/00070700210418767

Bechy, B. A., & Okhuysen, G. A. (2011). Expecting the unexpected? How SWAT officers and film crews handle surprises. *Academy of Management Journal, 54*(2), 239–261. https://doi.org/10.5465/amj.2011.60263060

Bene, C., & Haddad, L., (Producer). (2013). Understanding resilience for food and nutrition security. Global Hunger Index. https://www.globalhungerindex.org/issues-in-focus/2013.html

Bickel, G., Nord, M., Price, C., Hamilton, W., & Cook, J. (2000). *Guide to measuring household food security*. Revised; measuring food security in the United States. United States Department of Agriculture (USDA). https://fns-prod.azureedge.net/sites/default/files/FSGuide.pdf

Booth, S., & Smith, A. (2001). Food security and poverty in Australia - challenges for dietitians. *Australian Journal of Nutrition & Dietetics, 58*(3), 150–156. https://dietitiansaustralia.org.au/wp-content/uploads/2016/12/58-3-review-paper.pdf

Brown, E. M., & Tarasuk, V. (2019). Money speaks: Reductions in severe food insecurity follow the Canada child benefit. *Preventive Medicine, 129*, 105876. https://doi.org/10.1016/j.ypmed.2019.105876

Browne, J., Laurence, S., & Thorpe, S. (2009). *Acting on food insecurity in urban Aboriginal and Torres Strait Islander communities: Policy and practice interventions to improve local access and supply of nutritious food*. https://pdfs.semanticscholar.org/88fa/cb39cd108e471de0b76e673af92190d695b0.pdf. www.healthinfonet.ecu.edu.au/health-risk/nutrition/other-reviews

Burns, C., Cook, K., & Mavoa, H. (2013). Role of expendable income and price in food choice by low income families. *Appetite, 71*, 209–217. https://doi.org/10.1016/j.appet.2013.08.018

CARE. (2002). *Household livelihood security assessments: A toolkit for practitioners*. Prepared for the PHLS Unit by: TANGO International Inc, Tucson, Arizona.

Chilton, M., & Rose, D. (2009). A rights-based approach to food insecurity in the United States. *American Journal of Public Health, 99*(7), 1203–1211. https://doi.org/10.2105/AJPH.2007.130229

Coleman-Jensen, A., Nord, M., & Singh, A. (2013). *Household food security in the United States in 2012*. United States Department of Agriculture. https://www.ers.usda.gov/webdocs/publications/45129/39937_err-155.pdf?v=0

Dietitians of Canada. (2016). *Prevalence, severity and impact of household food insecurity: A serious public health issue*. Dietitians of Canada. https://www.dietitians.ca/Downloads/Public/HFI-Background-DC-FINAL.aspx
Dinour, L., Bergen, D., & Yeh, M.-C. (2007). The food insecurity-obesity paradox: A review of the literature and role of food stamps may play. *Journal of the American Dietetic Association, 107*(11), 1952–1961. https://doi.org/10.1016/j.jada.2007.08.006

Dowler, E. A., & O’Connor, D. (2012). Rights-based approaches to addressing food poverty and food insecurity in Ireland and UK. *Social Science & Medicine, 74*(1), 44–51. https://doi.org/10.1016/j.socscimed.2011.08.036

Ellemers, N., Spears, R., & Doosje, B. (2002). Self and social identity. *Annual Review of Psychology, 53*(1), 161–186. https://doi.org/10.1146/annurev.psych.53.100901.135228

Finlay, L. G., & Gough, B. (2003). Reflexivity. A practical guide for researchers in health and social sciences. In B. S. Ltd (Ed.), ix, Blackwell Publishing Company.

Food and Agriculture Organisation. (2008). *an introduction to the basic concepts of food security*. Food and Agriculture Organisation (FAO). www.foodsec.org/docs/concepts_guide.pdf: EC - FAO Food Security Programme http://www.fao.org/3/a-al936e.pdf

Food and Agriculture Organisation. (2012). *Coming to terms with terminology: Food security, nutrition security, food security and nutrition, food and nutrition* [Paper presented]. Committee on World Food Security, Thirty-ninth Session, Rome, Italy.

Food Research & Action Center. (2017). *Hunger and health - The impact of poverty, food insecurity, and poor nutrition on health and well-being*. Food Research & Action Centre. http://frac.org/wp-content/uploads/hunger-health-impact-poverty-food-insecurity-health-well-being.pdf

Franklin, B., Jones, A., Love, D., Puckett, S., Macklin, J., & White-Means, S. (2012). Exploring mediators of food insecurity and obesity: A review of recent literature. *Journal of Community Health, 37*(1), 253–264. https://doi.org/10.1007/s10900-011-9420-4

Furber, C. (2010). Framework analysis: A method for analysing qualitative data. *African Journal of Midwifery & Women’s Health, 4*(2), 97–100. https://doi.org/10.12968/ajmw.2010.4.2.47612

Gale, N. K., Heath, G., Cameron, E., Rashid, S., & Redwood, S. (2013). Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology, 13*(1). https://doi.org/10.1186/1471-2288-13-117

Gallegos, D., Ellies, P., & Wright, J. (2008). Still there’s no food! Food insecurity in a refugee population in Perth, Western Australia. *Nutrition and Dietetics, 65*(1), 78–83. https://doi.org/10.1111/j.1747-0080.2007.00175.x

Gregory, C. A., & Coleman-Jensen, A. (2017). *Food insecurity, chronic disease, and health among working-age adults*. Retrieved from Washington, DC: U.S. Department of Agriculture. https://nopr.nimr.nih.gov/npa/docs/201708ERS-ReportFood-Insecurity-Chronic-Disease-and-Health-Among-Working-Age-Adults.pdf

Hart, T. (2009). Exploring definitions of food insecurity and vulnerability: Time to refocus assessments. *Agrekon, 48*(4), 362–383. https://doi.org/10.1080/03031853.2009.9523832

Harvey, K. (2016). "When I go to bed hungry and sleep, I’m not hungry": Children and parents’ experiences of food insecurity. *Appetite, 99*, 235–244. https://doi.org/10.1016/j.appet.2016.01.004

Hernandez, D. C., & Jacknowitz, A. (2009). Transient, but not persistent, adult food insecurity influences toddler development. *American Society for Nutrition, 139*(8), 1517–1524. https://doi.org/10.3945/jn.109.105593

Hoddinott, J. (2014). *Understanding resilience for food and nutrition security* [Paper presented]. Building Resilience for Food & Nutrition Security, Washington, DC, USA. http://2020resilience.ifpri.info

Hudson, N. (2016). The trauma of poverty as social identity. *Journal of Loss and Trauma, 21*(2), 111–123. https://doi.org/10.1080/15325024.2014.965979
Jacobson, T. L. (2016). Amartya Sen’s capabilities approach and communication for development and social change. *Journal of Communication, 66*(5), 789–810. https://doi.org/10.1111/jcom.12252

Kleve, S., Davidson, Z., Gearon, E., Booth, S., & Palmero, C. (2017). Are low-to-middle-income households experiencing food insecurity in Victoria, Australia? An examination of the Victorian population health survey, 2006-2009. *Australian Journal of Primary Health, 23*(3), 249–256. https://doi.org/10.1071/PY16082

Knowles, M., Rabinovich, J., Ettinger de Cuba, S., Cutts, D., & Chilton, M. (2016). “Do you wanna breathe or eat?”: Parent perspectives on child health consequences of food insecurity, trade-offs, and toxic stress. *Maternal and Child Health Journal, 20*(1), 25–32. https://doi.org/10.1007/s10995-015-1797-8

Krantz, L. (2001). *The sustainable livelihood approach to poverty reduction - An introduction.* Swedish International Development Cooperation Agency. http://www.forestry.umn.edu/prod/groups/cfans/@pub/@cfans/forestry/documents/asset/cfans_asset_202603.pdf

Laraia, B. A. (2013). Food insecurity and chronic disease. *Advances in Nutrition, 4*(2), 203–212. https://doi.org/10.3945/an.112.003277

Martin, J. K., Lang, A., & Olafsdottir, S. (2008). Rethinking theoretical approaches to stigma: A Framework Integrating Normative Influences on Stigma (FINIS). *Social Science Medicine, 67*(3), 431–440. https://doi.org/10.1016/j.socscimed.2008.03.018

Maxwell, D., Caldwell, R., & Langworthy, M. (2008). Measuring food insecurity: Can an indicator based on localized coping behaviors be used to compare across contexts? *Food Policy, 33*(6), 533–540. https://doi.org/10.1016/j.foodpol.2008.02.004

Maxwell, D., Levin, C., Armar-Klemesu, M., Ruel, M., Morris, S., & Ahiadeke, C. (2000). *Urban livelihoods and food and nutrition security in greater Accra, Ghana.* International Food Policy Research Institute. www.cgiar.org/ifpri/pubs/pubs.htm#report

Mayer, V. L., McDonough, K., Seligman, H., Mitra, N., & Long, J. A. (2015). Food insecurity, coping strategies and glucose control in low-income patients with diabetes. *Public Health Nutrition, 19*(6), 1103–1111. https://doi.org/10.1017/S1368980015002323

McCrindle Research. (2017). *Foodbank hunger report 2017.* Foodbank Australia. https://www.foodbank.org.au: https://www.foodbank.org.au/hunger-in-australia/foodbank-hunger-report-2017/

McKechnie, R. E. A., Turrell, G., Giskes, K., & Gallegos, D. (2018). Single-item measure of food insecurity used in the national health survey may underestimate prevalence in Australia. *Australian and New Zealand Journal of Public Health, 42*(4), 389–395. https://doi.org/10.1111/1753-6405.12812

Michalski, J. H. (2003). The economic status and coping strategies of food bank users in the greater Toronto area. *Canadian Journal of Urban Research, 12*(2), 275–298. www.jstor.org/stable/44320774

Middleton, G., Mehta, K., McNaughton, D., & Booth, S. (2018). The experiences and perceptions of food banks amongst users in high-income countries: An international scoping review. *Appetite, 120*, 698–708. https://doi.org/10.1016/j.appet.2017.10.029

Naderifar, M., Golli, H., & Ghalejia, F. (2017). Snowball sampling: A purposeful method of sampling in qualitative research. *Strides in Development of Medical Education, 14*(3). https://doi.org/10.5812/sdme.67670

Nolan, M., Rikard-Bell, G., Mohsin, M., & Williams, M. (2006). Food insecurity in three socially disadvantaged localities in Sydney, Australia. *Health Promotion Journal of Australia, 17*(3), 247–254. https://doi.org/10.1071/HE06247

Nord, M. (2009). Food insecurity in households with children: Prevalence, severity, and household characteristics. *Economic information bulletin number 56.* United States Department of Agriculture. https://eric.ed.gov/?id=ED508211
Puddephatt, J.-A., Keenan, G. S., Fielden, A., Reeves, D. L., Halford, J. C. G., & Hardman, C. A. (2019). 'Eating to survive': A qualitative analysis of factors influencing food choice and eating behavior in a food-insecure population. *Appetite, 147*, 104547. https://doi.org/10.1016/j.appet.2019.104547

Ramsey, R., Giskes, K. G. T., Gallegos, D., & Gallegos, D. (2012). Food insecurity among adults residing in disadvantaged urban areas: Potential health and dietary consequences. *Public Health Nutrition, 15*(2), 227–237. https://doi.org/10.1017/S1368980011001996

Rosie, K. (2011). *Food insecurity in Australia what is it, who experiences it and how can child and family services support families experiencing it?* Australian Institute of Family Services. http://www.aifs.gov.au/cafca/pubs/sheets/ps/ps9.pdf

Sanjeevi, N., Freeland-Graves, J., & Hersh, M. (2018). Food insecurity, diet quality and body mass index of women participating in the supplemental nutrition assistance program: The role of intrapersonal, home environment, community and social factors. *Appetite, 125*, 109–117. https://doi.org/10.1016/j.appet.2018.01.036

Scoones, I. (1998). Sustainable rural livelihoods a framework for analysis - IDS working paper 72. Institute of Development Studies.

Slater, J. A. Y. F., & Yeudall, F. (2015). Sustainable livelihoods for food and nutrition security in Canada: A conceptual framework for public health research, policy and practice. *Journal of Hunger and Environmental Nutrition, 10*(1), 1–21. https://doi.org/10.1080/19320248.2015.1004220

Smith, J. F., & Firth, J. (2011). Qualitative data analysis: The framework approach. *Nurse Researcher, 18*(2), 52–62. https://doi.org/10.7748/nr2011.01.18.2.52.c8284

Stevens, C. A. (2010). Exploring food insecurity among young mothers (15-24 years). *Journal for Specialists in Pediatric Nursing, 15*(2), 163–171. https://doi.org/10.1111/j.1744-6155.2010.00235.x

Tarasuk, V. (2001). A critical examination of community-based responses to household food insecurity in Canada. *Health Education & Behavior, 28*(4), 487–499. https://doi.org/10.1177/109019810102800408

Upton, J. B., Cissé, J. D., & Barrett, C. B. (2016). Food security as resilience: Reconciling definition and measurement. *Agricultural Economics, 47*(S1), 135–147. https://doi.org/10.1111/agec.12305

Ward, D., Furber, C., Tierney, S., & Swallow, V. (2013). Using framework analysis in nursing research: A worked example. *Journal of Advanced Nursing, 69*(11), 2423–2431. https://doi.org/10.1111/jan.12127

WHO/EAHA. (1998). *Emergency health training programme for Africa 1.9 coping mechanisms.* World Health Organization. http://apps.who.int/disasters/repo/5517.pdf

Woller, G. (2009). Livelihood & food security conceptual framework. In J. Wolfe, M. Brand, L. Parrot, B. Fowler, J. Thompson, J. Dempsey, L. Berkowitz, & B. van Haeften (Eds.), USAID.