Advancing Climate-Friendly Everyday Living: **Life Transitions as Unique Opportunities**



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Advancing Climate-Friendly Everyday Living: Life Transitions as Unique Opportunities

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Summary

This report explores why life transitions, such as starting university, becoming a parent, immigrating, and retiring, can serve as effective intervention points to advance low-carbon living. Based on a review of the literature and practice, it highlights 10 elements that make life transitions promising opportunities to take action. This report identifies how to use these moments to support people going through transitions while encouraging pro-environmental behaviour.

Climate change is one of the most important challenges we face, and its mitigation requires efforts by all sectors and actors at all levels. Household activities that result in direct or indirect emissions are responsible for a significant three quarters of GHG emissions. Attempts to lead to more proenvironmental behaviour have generally had little impact because there is often a gap between environmental awareness and corresponding behaviour (1). Social norms are shifting toward more sustainable futures. However, this change is not occurring at the rate needed to mitigate and adapt to climate change. Because of their disruptive nature, life transitions provide unique opportunities for people to change and for interventions to support climate-friendly behaviour. This disruption can cause significant changes in people's routines and identities. However, life transitions are complex moments that need to be navigated with care.

Understanding the underlying factors that shape pivotal moments in people's lives is important for providing support that encourages well-being and enables people to live in a way that is healthy and sustainable.

There are 10 characteristics of life transitions that make them promising opportunities for advancing carbon-friendly lifestyles:

- 1. They are dynamic moments of change
- 2. They cause a disruption of habitual behaviour
- 3. They lead to periods of increased curiosity and advice seeking
- 4. They are times of high social support needs
- 5. They offer windows of opportunity for tailored interventions
- 6. They are periods of collective experiences: Linked lives and group membership
- 7. They are moments of shifting identities
- 8. They are times when people need significant structural support
- 9. They are moments shaped by culture
- 10. They are moments where possible support agents are everywhere

These 10 characteristics of life transitions distinguish them as distinct and important moments in which people can be empowered and supported to change their ways of living toward sustainability. Relatives, friends, communities, organizations, institutions, and policies should be a source of support for people going through life transitions, both for their well-being and how they live their lives posttransition.



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Climate Change Requires Urgent Action

Renowned biologist and natural historian David Attenborough calls climate change the "Biggest Threat Modern Humans Ever Faced" (2).

A report by the Intergovernmental Panel on Climate Change (IPCC) concludes that greenhouse gas emissions (GHGs) from human activities are responsible for approximately 1.1°C of warming since 1850-1900 (3). The report warns that limiting global warming to 1.5°C or 2°C will not be achievable unless there are significant, immediate, and widespread reductions in greenhouse gas emissions (4).



"We are at a crossroads. The decisions we make now can secure a liveable future. We have the tools and know-how required to limit warming ... I am encouraged by climate action being taken in many countries. There are policies, regulations and market instruments that are proving effective. If these are scaled up and applied more widely and equitably, they can support deep emissions reductions and stimulate innovation." - IPCC Chair Hoesung Lee (5)

As illustrated by Figure 1, the window of opportunity to ensure a liveable and sustainable future for all, is closing.

Multiple interacting choices and actions can shift

Figure 1. The Outcomes of Different Development Pathways

There is a rapidly narrowing window of opportunity to enable climate resilient development

development pathways towards sustainability Conditions that enable Sustainable Development Goal (SDG) achievement Inclusive governance · Diverse knowledges and values · Finance and innovation Low emissions Integration across sectors and time scales System transitions Transformation · Ecosystem stewardship Low climate risk Synergies between climate and development actions Equity and justice Behavioural change supported SDG achievement by policy, infrastructure and socio-cultural factors High emissions Entrenched systems Past con Adaptation limits Maladaptation Conditions that constrain Increasing climate risk elopment gaps persist Prospects for climate Reduced options for development · Poverty, inequity and injustice Ecosystem degradation Economic, institutional, social and capacity barriers warming exceeds 1 if progress towards the SDGs is inadequate Siloed responses Lack of finance, and barriers to finance and technology Illustrative 'shock' that disrupts development Tradeoffs with SDGs

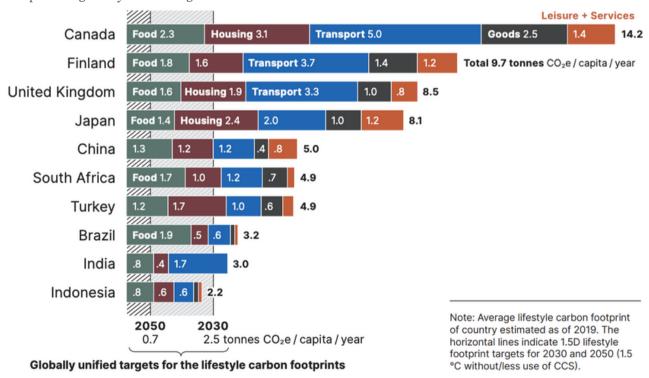
Source: Taken from IPCC, 2023: AR6 Synthesis Report: Climate Change 2023

It is undeniable that human influence is causing climate change (4). Therefore, climate change is, at its foundation, a human behaviour problem. According to the IPPC, demand-side mitigation, which includes lifestyle and behaviour changes as well as changes in infrastructure use and end-use technology, can reduce global GHG emissions in end-use sectors by 40–70% before 2050 with the right policies, technologies, and infrastructure in place (6). They emphasize that these lifestyle and behaviour changes can lead to increased equity and well-being. As such, it is also critical to frame climate change mitigation through a behaviour change lens.

Possible demand-side GHG reduction
40–70%

Climate Impact of Households in the Canadian Context

Figure 2. Lifestyle carbon footprint and its breakdown between consumption domains for various countries compared to globally unified targets.



Source: Figure C from Akenji L, Bengtsson M, Toivio V, Lettenmeier M, Fawcett T, Parag Y, et al. 1.5-Degree Lifestyles: Towards A Fair Consumption Space for All

In 2015, Canadian households were directly responsible for 142,936 kilo tonnes of CO₂ equivalent greenhouse gas emissions, accounting for 19% of total emissions in Canada (7). When indirect emissions from the consumption of goods and services are considered, household emissions represent 42% of total Canadian GHG emissions that year (7). Global direct and indirect household consumption is estimated to represent approximately 72% of total global GHG emissions, with food accounting for 20%, residence operation and maintenance 19%, and mobility 17% (8).

Household consumption is related to of global emissions

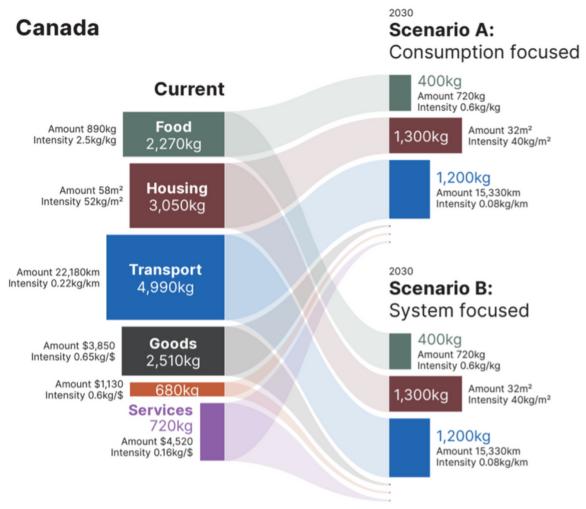
These numbers show that the way we live our lives can have a major impact on global greenhouse gas emissions when they are repeated and in the cumulative effects of the everyday practices of millions of people. People's lifestyles, such as the food and drinks they consume, the size, materials, and heating of their homes, the way they spend their leisure time, and the modes of transport they use, all have a major impact on how sustainable or unsustainable their lives are. As shown in Figure 2, burning fossil fuels for heating and electricity, wasting food, high consumption of red meat and dairy, overconsumption of goods, air travel, as well as using cars to commute, produce large amounts of CO₂ that contribute to the rise in global temperatures. Initiatives to mitigate the carbon footprint of human consumption must find solutions to these everyday practices.

Figure 3. Local Ecological Footprint in Southwest BC

Lighter living priorities Our ecological footprint in Southwest BC Some actions matter more than others in addressing our climate and ecological crises. Here is the latest science and research on our local footprint in Southwest British Columbia. **Highest-priority action areas** FOOD = 50% Key contributors: meat and dairy consumption, wasted food MOBILITY = 25% Key contributors: fossil fuel use in private vehicles and other modes of transportation (e.g., air travel, buses and trucks) **BUILDINGS = 15%** Key contributors: gas heating, energy and materials used for construction, inefficient BC's ecological and carbon footprint help us see how close (or far) we are to living within energy use the limits of our planet, and what we need to do to get on track - as individuals and as STUFF = 10% communities. From an ecological footprint perspective, the highest impact area is food. Key contributors: resource extraction. From a climate perspective, it's mobility. The bottom line? We need to focus on all of these action areas to bring down our footprints. manufacturing, transportation, waste credit: BCIT Centre for Ecocities

Source: Lighter Living Action Pack for Neighbourhoods adapted from BCIT Centre for EcoCities

Figure 4. Current lifestyle carbon footprints and estimated consumption- and system-focused scenarios with needed adoption rates of selected low-carbon lifestyle options to meet the 1.5°C target by 2030 (Canada)



Source: Figure 10.1 of Akenji et al., (2021). 1.5-Degree Lifestyles: Towards A Fair Consumption Space for All.

Research shows that there is a disconnect between how households view their role in mitigating climate change and their ability to do so, and the roles and responsibilities that climate policies communicate (9). People widely underestimate the amount of greenhouse gases produced by their activities and struggle to make accurate trade-offs between different GHG emitting actions such as flying or eating a hamburger (10). High-emission food items (e.g., beef) are found to be underestimated much more than items associated with low emissions (e.g., apples) (11). Car and air travel, as well as the consumption of meat and dairy products, all heavily contribute to household footprints. As a result, they should be primary areas of study and policy targets for significant reductions in household footprint (9). However, when people have deeply ingrained consumption habits, such interventions are challenging to implement. Initiatives to address food and mobility are more likely to be problematic, as they can be perceived as related to status and identity (9). This can create tension between trying to promote environmentally friendly behaviour and maintaining individuals' sense of well-being.

However, the overall potential contribution of households to climate policies is poorly understood, and households are not given enough priority in the current climate policy strategies (9). Although household behaviour contributes a major amount to global GHG emissions, there is a significant opportunity to reduce household emissions through more sustainable lifestyle practices, as shown in Figure 5. Climate policy strategies must prioritize supporting sustainable transitions at the household and community level through lifestyle and behaviour changes as key pieces of the puzzle along with technology and supply-side solutions.

Compative emissions reduction potential by 2016 acress six consumption categories.

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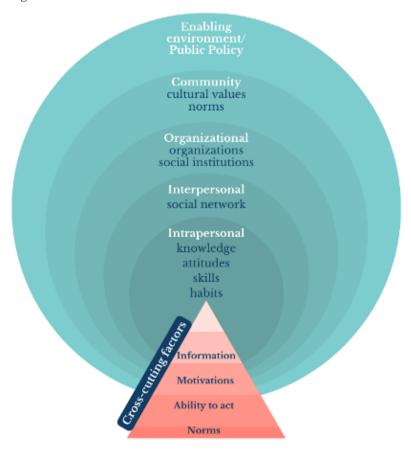
Figure 5. The Cumulative Emissions Reduction Potential by 2050 Across 6 Consumption Categories

Source: Figure from C40 Cities Climate Leadership Group. (2019). The Future of Urban Consumption in a 1.5 C World Report

Toward a Sustainable Transition

The sustainability transition - enabling thriving lives for all within planetary boundaries - requires changes in people's behaviour. Behaviour change frameworks can help identify which behaviours and broader lifestyles need to be changed, the key factors underlying them, and the barriers that prevent such changes (12,13). Due to the complexity of human behaviour, multiple models and theories have been developed to explain various aspects of behaviour. While these frameworks can help explain behaviour, they can also help develop methods for changing behaviour. Understanding the complexities of changing behaviour requires considering the various levels of interactions that influence behaviour. This necessitates systems thinking, which is a holistic approach that focuses on the whole rather than parts, takes into account the interrelationships and interconnectedness of various elements that influence each other, and recognizes that changes in one area can have ripple effects throughout the entire system (14). Behavioural ecological models, which are based on systems thinking, provide a comprehensive view of behaviour change by recognizing that personal, environmental, social, cultural, and political factors all play a role in shaping an individual's behaviour. All the levels displayed around the intrapersonal circle in Figure 6 influence a person's behaviour. On the other hand, an individual cannot do for their community what they cannot do for themselves; consequently, societal change also begins with individual change (139).

Figure 6. Socio-ecological Model of Behaviour



Source: Adapted from McLeroy, Kenneth R., Daniel Bibeau, Allan Steckler, and Karen Glanz. 1988. "An Ecological Perspective on Health Promotion Programs." Health Education Quarterly 15(4): 351-377 and Agrawal, P., Aruldas, K., Khan, M. E., & Mondal, S. (2014). "Monitoring and evaluation of social and behavior change communication health Program".

Changing people's knowledge, beliefs and intentions has frequently been the focus of interventions designed to alter daily behaviour toward more environmentally friendly actions. However, research overwhelmingly shows that interventions to alter intentions have little effect on behaviour, especially when strong habits are established (15,16). To achieve the widespread action, and lifestyle changes required to limit global warming to 1.5°C or 2°C, change must occur on every level of the Socioecological Model of Behaviour. As defined by Akenji and Chen in A framework for shaping sustainable lifestyles, a sustainable lifestyle "is a cluster of habits and patterns of behaviour embedded in a society and facilitated by institutions, norms and infrastructures that frame individual choice, in order to minimize the use of natural resources and generation of wastes, while supporting fairness and prosperity for all" (17).

The Handbook of Behavior Change states that "Behavioral determinants with the largest effects are often those related to the environments in which behaviors occur. This suggests the merits of a shift in focus of 'changing behavior at scale away from interventions based on deliberation and decision-making and toward interventions that involve changing cues – physical, digital, social, and economic – in environments" (p. 193)(18). However, changing these environmental and societal cues is no easy task. This leads to the question:

Are there times in people's lives when supporting low carbon transitions could be more effective?



Photo by Roger Bradshaw on Unsplash

Leveraging Life Transitions to Accelerate Low-Carbon Living

Life transitions are natural moments of disruption in our daily lives. As described by Verplanken & Roy, "life course changes disrupt old habits and may create a mood for more change", making behaviour change interventions more effective when delivered during life course changes (19). As we note below, there are a number of characteristics that make life transitions a promising period for accelerating climate-friendly living. We can harness life transitions to shift thinking and to guide and support new patterns of low-carbon behaviour.

What are life transitions?

Having a child, immigrating, relocating, and changing careers are just a few of the life transitions that people can experience over the course of their lives. Life transitions can be defined as "event, or non-event, that results in changed relationships, routines, assumptions, and roles" (p. 27) (20). Life transitions are universal, but they are experienced in deeply diverse ways.

A life transition can be planned, or it can happen unexpectedly. For example, normative events are those we might expect in our life course, such as going to school, getting married, retiring, getting a new job, etc. Non-normative events are those that we would not typically expect, such as health events, relationship changes, or natural disasters. The transition process has often been conceptualized as having three phases (21,20). For example (21):

- 1. The ending of prior life
- 2. The neutral zone
- 3. The beginning of a new phase



Photo by HiveBoxx on Unsplash

Based on theories related to behaviour and habits, transitions are reflective moments in which people may be more open to changing their consumption patterns. Everyday carbon intensive behaviour is shaped by the context people are in and the often unconscious habits that guide our everyday practices (22).

Interventions that aim to alter behaviour at the individual level must not place the burden on individuals and only focus on attitude campaigns, but also put a strong emphasis on breaking habits, increasing social support, and increasing self-efficacy (23). As previously noted, behaviour patterns shift when we create a supportive, enabling environment for change.

10 ways Life Transitions are Promising for Advancing Carbon-Friendly Lifestyles

1. Dynamic Moments of Change

Research shows that life transitions are not discrete events with an obvious start and end date, but continuous processes (24). They typically include a series of changes that may take place over an extended period. For example, the transition to parenthood typically starts before the child is born as parents prepare for their child and continues for some time afterward as they adjust to their new roles and responsibilities. The transition to parenthood for first-time mothers begins early in pregnancy as their bodies change (25). Similarly, the transition to retirement can begin years before the individual retires and continue as they navigate their new lifestyle and daily routine. Thunborg and Bron's study of the lives of graduate students found that the students' constant transitions were marked by two states: recurrent formation, in which they often went back to well-trodden paths in life, and constant transition, in which they thought about their next move (26).

As life transitions are ongoing processes, household behaviours may change over this time period. To fully understand the impact of life transitions on consumption and related emissions, they must be viewed as dynamic moments, rather than as a one-time event. As Merriam described, "Adult life consists of alternating periods of stability and transition" (27). Each subsequent transition creates some disruptions, which may be an opportunity to either lose or reinforce certain behaviours. This may have implications for stable interventions in different normative life transitions.

Also, life transitions are not mutually exclusive, so we can go through multiple life transitions simultaneously. For example, when a new college student moves onto campus, they go through both a role-based and a place-based transition. What is interesting about overlapping transitions is that they offer more extensive changes in contextual cues. This means that targeting overlapping transitions could be even more successful in promoting lifestyle changes. Therefore, it is important not to reduce life transitions to being perceived as simple, linear processes. As Baker and Irwin argued, "The dominance of the conceptualization of transition as linear drives simplistic thinking, resulting in reductive policy and practice" (28). As Hörschelmann explains, "instead of a fixed notion of movement from one developmental stage to another, which closes off the possibility of diverse outcomes, reversals, returns and reinventions, exploring transitions that occur over the life course draws attention to the unpredictability and precariousness of lives, demanding more rather than less curiosity about the causes and consequences of societal change." (29)

By embracing the dynamic and multifaceted nature of life transitions, we can gain a better understanding of how people navigate change throughout their lives and how this can be harnessed for change. This requires exploring the complexities of transitions and recognizing the diverse experiences and perspectives of those experiencing them. In the end, a more nuanced understanding of life transitions can lead to more effective policies and interventions aimed at promoting positive lifestyle changes and assisting individuals through life changes.

2. Disruption of Habitual Behaviour

A habit is a cognitive representation of a response to a cue action (20,21). Automatic repetition of behaviour creates a link between the context and the behavioural response (30). As a result, once a behaviour is repeated enough times to become automatic, it becomes a habit. Through its association with the context, the behavioural response is activated. Prior behaviour frequency is a good predictor of very context-specific behaviour, such as wearing a seatbelt, but not of actions performed in multiple contexts, which depend on the coherence of behaviour and environment (31).

Both conscious and unconscious cognitive processes can influence our behaviour (22). Due to context-specific behavioural repetition, behavioural control gradually transitions from being internally guided to being activated by external contextual cues (32). Thus, a habit is created through the progressive transition of cognitive control processes from intentional to automatic. The decision-making process required to carry out an action diminishes as habits are strengthened (33). Since habits are set off by contextual stimuli, goal state activation, which is people's conscious intentions to carry out an action, is not required (30). On the other hand, non-habitual behaviour frequently matches thoughts, indicating that certain thoughts contribute to the development of corresponding behaviour (34). Although goal-state activation may not always be necessary for a habitual behaviour to be expressed, it is typically the beginning point of its development.

Developing habits has various advantages for simplifying our daily lives. Habits allow us to save cognitive effort by requiring less conscious attention for recurring tasks (35). This is called the 'cognitive economy' generated by habits (34). Habits free up cognitive capacity, allowing us to focus on other activities that may be more novel or require more conscious deliberation and effort. However, not being deliberate with our actions also means that automatic actions may not always be the most optimized actions. For example, habits that impact consumption can have significant economic value and environmental impact (35). If we are not taking the most cost-effective actions because we are not being deliberate when doing them, it can add up. Therefore, because of the difficulty of changing habitual behaviour, intervening at moments where habits are naturally disrupted is a promising strategy (36).

Life transitions offer discontinuities, and discontinuities set the stage for more deliberate processes, which can lead to more successful interventions. This is referred to as the **Habit discontinuity** hypothesis.

"Major discontinuities may involve transitions to new phases in life (e.g., from education to a job), geographical or physical changes (e.g., residential, or work-related relocations), or changes in the environment where habits are executed (e.g., infrastructural changes). Such discontinuities may force people to renegotiate ways of doing things, create a need for information to make the alternative choices, and a mind-set of being 'in the mood for change'. Interventions that capitalize on these conditions may thus be more effective compared to interventions under default conditions"(19).

This makes life transitions an ideal time to encourage changes in household consumption behaviour, as they present an opportunity to put more effort into making conscious, sustainable decisions that, over time, could become a habit and result in positive long-term behaviour change.

Transition Spotlight: Relocation

A study by Verplanken & Roy (2016) tested an intervention to promote sustainable behaviour in 800 households. They looked at the impact of the intervention on people who had just moved, and the results were compared with those of non-movers and a no-intervention control group. The results showed that instilling behaviour change was more successful in participants who had recently moved home (19).



3. Periods of Increased Curiosity and Advice Seeking

Life transitions come with varying degrees of uncertainty, which can add some challenges to the coping and adaptation processes (21). But amidst the increase in stress, uncertainty can lead people to become more open to new ways of living. According to Selder (1989), the primary aim of a life transition is to resolve uncertainty (138). Uncertainty stimulates curiosity because the desire to reduce uncertainty motivates exploration (37–39). As a result, people going through life transitions may have a greater propensity to learn new things and explore diverse options, such as searching for a new transportation mode or new ways to reduce their electricity bill. In fact, research shows that uncertainty promotes information-gathering processes and that a relationship exists between smaller perceived knowledge gaps and greater curiosity (37).

Introducing and resolving uncertainty in an intervention can increase an individual's willingness to engage with the information (40). Therefore, it is recommended to introduce new ideas and knowledge during life transitions, such as when a person is transitioning to a new home, as they may be more willing to explore and learn something unfamiliar because of the inherent uncertainty of the transition. For example, Britton and colleagues note that "to alleviate mental health issues and to support identity re-negotiation, mothers are increasingly turning to online mothers' groups, particularly private and secret Facebook groups; these can provide a complex system of social, emotional, and practical support for new mothers" (43). Furthermore, discussing certain life transitions on social media platforms with known connections may be challenging due to potential stigmatization (131). Dedicated online networks that offer some anonymity can offer safe spaces for individuals to discuss, seek support and seek information more openly (131).

Therefore, such tools must be in place to allow people the space to be curious and activate their information seeking behaviours. These tools must highlight alternative, more carbon friendly ways of going through a certain transition, such as buying energy efficient appliances, using car share services instead of purchasing a vehicle, and using reusable diapers.

This is also a period where people seek advice from others, including those closest to them, their families and friends, and those who have experienced a similar life transition (e.g., other new students, parents, immigrants, retirees). The next two characteristics of life transitions—times for social support and periods of shifting group membership—examine the social nature of these transitions in more detail.



Photo by SaiKrishna Saketh Yellapragada on Unsplash

4. Times of High Social Support Needs

Life transitions can be incredibly stressful moments, and that may have important implications for sustainability. As discussed by Kollmuss and Agyeman, "primary motives, such as altruistic and social values, are often covered up by the more immediate, selective motives, which evolve around one's own needs (e.g., being comfortable, saving money and time)" (p. 251) (1). Longitudinal research on transitions to parenthood and retirement shows that environmental goals are often subsumed by caring responsibilities or one's own health needs (24). Furthermore, research on new parents shows that those who must balance the demands of childcare with work and other obligations are less likely to prioritize environmental issues (41). Conflict between short-term needs and long-term environmental goals, as well as competing priorities and social expectations, can make it difficult for individuals to prioritize sustainable behaviours during life transitions. Even when there is an initial intention to adopt proenvironmental behaviour, executing it may take a back seat to more important needs. Therefore, if a life transition adds extra challenges to meeting these needs, that may reduce the propensity for someone to engage in pro-environmental behaviour.

According to the Meta-Gallup State of Social Connections Study, at least one-third of people studied reported needing support or help in the past 30 days (42). So, the need for support is an essential part of the human experience. During life transitions, people's need for support can increase as they navigate change. For example, the transition to parenthood is a significant life adjustment that is often not adequately supported (43).

Transition Spotlight: Motherhood

Mothers appear to experience the transition to parenthood differently than their partners. This difference is not only the result of carrying and delivering the child has on their bodies, but also because of differences in gender roles. The transition to parenthood is a critical juncture in which an unequal gap in time spent on routine household labour emerges (130). Even when there were no gender gaps before the birth of a child, a gap developed in which a mother's household workload increased three times more than that of their partner (44).

Yet, new mothers greatly need support as they adjust to their new role, particularly from other women who have also gone through a motherhood transition (25). As mothers go through the transition, their support needs evolve, and socio-economic contexts influence the variation of these needs. When mothers receive elevated levels of social support, they experience lower levels of maternal depressive symptoms (45). Therefore, it is essential to make support readily available to new parents to provide them with the assistance they need to maintain their well-being and improve their capacity to engage in low-carbon living and prioritize sustainable behaviours.



Photo by Johnny Cohen on Chspiash

Embarking on a higher education is also a challenge for many students (<u>46,47</u>). First-year university students have higher levels of academic stress throughout the transition from secondary school to university than they do afterward (<u>48</u>). Therefore, it is recommended that support be provided before or during this transition phase to ensure that it is a more positive experience. Students consider the support from peers and friends on and off campus to be the most crucial source of support (<u>49</u>).

Also, social support can play a huge part in an immigrant's integration in a new country and is therefore crucial for a successful life transition (50). The feelings of belonging or isolation experienced by immigrants can be greatly influenced by the amount of social support they have (51).

It is clear that interpersonal support throughout the transition process plays a key role in one's ability to adapt to change (47,52). Research has shown that the perceived availability of support from groups can significantly buffer the negative effects of life transitions and adapting to change (53). The stress-buffering hypothesis proposes that the availability of social support, in various forms, is a crucial psychological resource to mitigate the negative impacts of stressful life events (54). The literature strongly supports the idea that social support serves as a buffer against the negative impact on health (55,56). Therefore, providing adequate support by making sure their needs are met could help reduce some of the barriers they face in adopting more pro-environmental behaviours.

Overall, this highlights the importance of considering the social dimension when designing interventions to promote sustainable behaviours. By leveraging social support, we can create a more conducive environment for individuals to adopt pro-environmental behaviours.

5. Windows of Opportunity for Increased Intervention Success for Tailored Interventions

The literature points to early support and interventions as crucial to benefit from the window of opportunity presented by the life transition. If support is provided too late in the transition, new habits may already have taken hold and be locked in (35). Some have observed that interventions are most successful for a few months after the main transition event (Moving-day, first day of school etc.) (57,58). Specifically, research on habit discontinuity found that the opportunity window caused by relocation lasted 3 months after participants moved (19). Therefore, finding the right timing is an important strategy when providing support, offering services, or providing information aimed at increasing wellness and making sustainable practices the default. This optimal timing for interventions can begin as soon as a person becomes aware of the impending transition they will undergo and continue for a few months after the transition's main event.

For example, Bejan and colleagues (2018)discovered that when participants receive information that allows them to plan their behaviour ahead of time to achieve a goal, they are more successful in developing new beneficial habits because it reduces the active deliberation required in early executions (35). When that information was unavailable, habits were less likely to be adjusted, and it elicited one-third of the response when compared to participants who were better equipped to establish new habits. When people can plan their behaviour in advance, they are more successful at creating beneficial habits that can improve their overall well-being and reduce their environmental impact. Also, an intervention delivered six weeks after relocation that included personalized information on public transport use for daily trips, and a 1-day free ticket increased the use of public transit by participants from 18% to 47% after relocation (58). This shows that a small incentive, when combined with personalized information at the right time, can have an impact on people's transportation behaviour.



However, with these types of interventions, overloading people with information during a stressful transition can also be counterproductive, especially if this information is generalized and not tailored to their situation (59). Even though information can increase climate literacy, this is not enough to lead to behavioural changes (60,61). Therefore, intervention and support measures to help people transition to more sustainable lifestyles must be contextual and supported by enabling environments that make low-carbon living accessible and desirable. Gaspari and colleagues (2021) note that, "given the diversity of attitudes, habits, preferences, and personal norms among individuals, these tools should be flexible and capable of being personalized" (p. 18), and tools need to be more person centered (129).

To effectively support people who are experiencing life transitions, the type of support must be tailored to their specific needs. This means identifying the main stressors of the transition and providing support that is appropriate and helpful to address these stressors (62). For example, emotional support can be crucial for individuals experiencing interpersonal stressors, such as relationship conflicts. Informational support can be more helpful for those facing decision-making stressors, such as moving to a new location. Providing material support, such as practical help with daily tasks, can support new parents. In other words, having access to the right social support can ease the challenges associated with major life changes.

Any form of support or intervention to enhance sustainable lifestyles during life transitions should aim to avoid making the transitions more challenging and be designed to fit with their lives to avoid resistance. For example, procedural knowledge that includes how to prepare healthy meals was found to be more impactful on changing dietary behaviour for participants without prior restrictions on certain food products (63). A guide on how to do certain actions can be especially useful in supporting people during life transitions, as it might ease the already substantial cognitive capacity that the novel situation requires. The provision of procedural 'knowing how' information that is practical and tailored to specific groups of people was found to be more effective in changing health behaviour compared to declarative 'knowing that' information (64). Even more effective would be to introduce people to new ways of living through tailored classes or workshops. Since information alone is insufficient, providing individuals with channels to build capacity is vital. In addition, providing these opportunities in a variety of formats (in person, online, etc.) can make them more accessible to a wider range of people.

Intervention Spotlight: Food choices

By offering cooking classes and food preservation strategies that were customized to meet the needs of the community, a community-tailored cooking program was able to boost the participants' cooking confidence, introduce them to new ingredients and techniques, and educate them on preventing food waste. The program's interactive and participatory format, which fostered social interaction, was highly valued by the participants, who continued practicing the techniques they had learned even after the program ended. Overall, the tailored approach of the program was successful in empowering the participants to prepare healthy meals and minimize food waste. (65)

6. Periods of Collective Experiences: Linked Lives and Group Membership

Linked Lives

Sometimes, we go through a transition together, such as when a family moves to a new home. Other times, a transition might appear to be an individual experience, such as a person getting laid off. However, life transitions are relational moments. As Settersten & Thogmartin (2018) explain, "transitions are experienced with and alongside others in states of interdependence. Family and other relationships can be key sources of support for transitions but also create risks" (p.360) (66).

Family members who share a home have shifting and relational roles (67). Each member of a family may have a unique perspective and approach to sustainability, which can have significant implications for how sustainable consumption is integrated while establishing the consumption patterns that make up their home life. For instance, children can play a considerable role in encouraging sustainable consumption in their homes through the use of positive pestering powers. (68). They can remind their parents to turn off lights, recycle, and conserve water, among other things. This can result in a shift in the family's collective behaviours towards more sustainable practices.

Therefore, the success or barriers to a certain desired outcome in a transition can come from the people around us. In fact, research shows that we tend to be more receptive to a request for action when it comes from someone we know (140). As Lewin described, a social system can be described as a 'force field, where forces move towards or against a change (69). This may be the case during life transitions with multiple people, such as a transition in a household unit. So, by recognizing and addressing the various forces at play within a household during a life transition, individuals and families can work towards achieving more sustainable outcomes. By working collaboratively to understand and address each family member's unique perspectives, families can create a shared vision of sustainability that is meaningful and relevant to everyone.

Hence, it is important to recognize the interdependence and shifting relational roles within families during transitions and work towards building a shared understanding and commitment to sustainability.



Photo by Jimmy Dean on Unsplash

Changing Group Memberships

There is an intricate connection between social group membership, which is the sense of belonging to a specific group, and life transitions. Group membership can influence how individuals experience life transitions, and vice versa. Transitions are said to be moments 'that create or reproduce social inequalities and risks of social exclusion' (70). The changes in group membership that occur due to life changes are part of what makes these moments challenging (71). In times of transition, maintaining social groups can ease the process by providing social support and maintaining a sense of consistency. Studies show that maintaining positive social group memberships through transitions can help reduce some of the negative effects of big life events on well-being (72). Group membership can aid in the treatment of depression symptoms and protect against its onset (73).



However, sometimes life transitions cause the loss of important group memberships, which can greatly affect one's well-being. Group memberships can be lost because of geographical relocation but also due to how the transition affects one's role. According to Schlossberg's 1981 'transition theory', life transitions can cause changes in people's social roles and relationships. Such changes can sometimes impact one's group memberships (20). For example, adjustments in social roles and responsibilities required for new parents can cause changes in their social networks and group memberships. When the social networks of new parents change, it can lead to increased feelings of depression (45)(74). On the other hand, the extent to which new mothers can maintain their valued group memberships (e.g., close friends or family) during the transition to motherhood can be predictive of better mental health (74).

Research on retirement shows that losing group membership during the retirement has considerable impacts on the quality of life of retirees (75). Loneliness, caused by loss of group membership after retirement, has been found to influence anxiety and depression (76). The effect of social group memberships and physical exercise on mortality were found to be similar, and maintaining social group memberships in retirement is linked to a lower risk of premature death (75).



Photo by Vlad Sargu on Unsplash

As much as maintaining group membership is critical, identifying with a new group is also an essential part of a successful transition, and it can help adjust to new circumstances (71). However, not all life transitions involve the same degree of loss of previous networks and do not all offer the same degree of opportunity for engagement with new groups and potential identities. Nevertheless, maintaining and forming group membership is a crucial aspect of life transitions and should be the focus of interventions that aim to facilitate life transitions while introducing individuals to new ways of living.

Sometimes, life transitions happen to multiple people simultaneously. For example, when a whole new cohort of university students arrives on campus. They are all going through a similar life transition simultaneously, which leads to a collective element. This collective aspect of transitions can be leveraged to drive positive change, such as in the realm of sustainability. For example, interventions that involve groups and public engagement have been shown to be more effective in fostering sustainable behaviours compared to individual-focused interventions (78). Collective actions that bring people together can create a sense of community and encourage the normalization of sustainable behaviours (60).

As people identify themselves as members of a group, they may be more motivated to pursue common environmental goals. This can lead to the development of pro-environmental behaviours that become the norm within the group. As expressed by Wenzel and Süßbauer, "the human ability to define oneself as a member of a group may represent a powerful source for realizing environmental endeavors" (79). Social and community networks can influence people's environmental attitudes and behaviours through diffusion (80), highlighting the significance of social interactions and group membership in promoting sustainable practices.

Therefore, life transitions involving multiple individuals provide a unique opportunity to promote sustainability by capitalizing on the collective nature of these experiences. By engaging people in collective and collaborative actions, we can foster a sense of community and empower individuals to be change agents, ultimately resulting in a more sustainable way of life.

The Power of Belonging

Individuals from underprivileged backgrounds can face additional challenges in adapting to life changes in addition to dealing with systemic inequality. Despite this, those belonging to disadvantaged groups, such as low-income or racial/ethnic minorities, can derive immense benefits from their group memberships during life transitions, serving as a source of support and aiding in the management of shifting identities in a new context (77).

7. Moments of Shifting Identities

Life transitions can lead to changes or transformations in an individual's sense of self and identity (85,86). Individual agency is essential in influencing pro-environmental behaviour, but this is said to be mainly the result of identity rather than attitude processes (81).

The concept of identity is complex, but in its most basic form, it refers to the way one describes or thinks about oneself (84). According to the social identity perspective, individuals define themselves by the social groups they belong to and the shared values and norms of those groups (87). This means that when individuals feel connected to a group or community that values sustainability, they tend to adopt sustainable behaviours as part of their own identity. Moreover, social identity can also facilitate collective action towards environmental goals. When people identify with a group that prioritizes sustainability, they are more likely to engage in collective efforts towards environmental action (82, 83). This is because a shared identity and sense of belonging can also motivate people to work towards a common goal.

As a result, changes in group membership can alter a person's social identity. The term "liminality" has been increasingly used in the context of life transitions. Derived from the Latin word for threshold, it is defined as a state of being in between social identities, where one has left their old life behind but has not yet arrived at the next stage (132-133). The state of liminality leads people to question who they are and can be an important moment for the formation of a new identity.

During life transitions, social identity continuity plays a pivotal role in forecasting an individual's well-being following a life event (88). The prior group memberships of an individual and the identities adopted in the new setting, which can help individuals integrate into new environments, are both necessary for a successful change of social identity (77). For instance, when new students start to define themselves as "university students," it's because they feel like they develop a sense of belonging (77). So, accepting a new identity may be important for maintaining wellness during a transition.

Students from lower socioeconomic backgrounds, on the other hand, can have a more difficult time adapting to the university setting (77). According to Iyer & Jetten, this is in part because of the difficulties in developing a new identity to match the new context (77). By having fewer group memberships before starting university, there is a perception that the university identity is less compatible with the group memberships in their previous networks (77).

Furthermore, the social context shapes individual attitudes about what behaviours are the norm (89). This is important for sustainability because pro-environmental behaviour can be influenced by different social identities. For example, family is often a critical social relationship that shapes people's environmental identity (90).

The Power of "We"

Precycling behaviours, which are approaches aimed at preventing packaging waste, can be stimulated by social influences such as family, neighbours, friends, and coworkers, according to a qualitative study (79). The study shows that precycling is not merely an individual practice but is rather intricately linked to various social components. Ingroup identification, ingroup norms, and collective efficacy beliefs are all factors related to social identity that influence a person's inclination to adopt environmentally friendly behaviours (79).

Generativity, which is the concern for future generations, has been shown to correlate with proenvironmental behaviours (91). Consequently, engaging individuals in generative behaviours may be a crucial component for the formation of an environmental identity and the adoption of proenvironmental behaviours (83). Developing environmental or green identities is a vital aspect of the deep change required to shift ways of living, as green identity has been found to be a good predictor of some pro-environmental behaviour (92–94).

Identity narrative refers to how people make sense of their lives and how they build the stories that make up their identities. As described by McAdams & McLean, "Narrative identity is a person's internalized and evolving life story, integrating the reconstructed past and imagined future to provide life with some degree of unity and purpose" (95).



Sometimes, role changes cause a shift in one's identity narratives, and self-narratives can help people revise and reconstruct identities during role transitions (134). When children leave home, parents face a new phase of change. Many parents find the transition to an empty nest difficult because it forces them to reconsider their roles and identities (96). This shift can lead to a feeling of loss of control and purpose for some parents, as they may struggle to find new ways to contribute to their households. Hogg et al. observed that consumption patterns change during this transition, as money is now spent on family-oriented consumption rather than spending time on productive household tasks such as cooking a meal or doing laundry (96).

Narratives have been found to be a powerful tool for either inciting or defusing certain behaviours (135). It's clear that the stories we tell about our lives play a huge role in how we act. Life transitions have been linked to Transformative Moments, which are short moments/experiences that lead to a significant change in pro-environmental behaviour (97). Transformative moments influence the stories we make to make sense of those moments, and that can have an impact on a person's identity narrative. As Hards (2012) proposed, some experiences in nature can provide people with new views on the environment, leading to transformative moments towards more sustainable ways of living (97).

Therefore, shifting and developing identities and narratives to include the environment can be a powerful means of shifting ways of living.

8. Times People need Significant Structural Support

The individual and social contexts of lifestyle changes have been discussed in the previous sections. However, there is another important factor that impacts how people live their lives, and the choices they make, and that is the structural context. The orange/red circle in Figure 7 explains what elements are included in structural support.

Sustainable lifestyle transitions require that we rethink how society, organizations, and infrastructures are organized, as they are necessary elements to mitigate climate change (98).

Figure 6.3. Mechanisms to change lifestyles Social and Contextual Media and Conventions advertising Citizen Interpersonal participation Social Social movements norms Structural Personal and **Immediate** Policies and Legal and Knowledge and Behaviour governance institutional information change frameworks Economics and Consumer Habits and Supply incentives choices routines Attitudes and Infrastructure awareness

Figure 7. The 3 major supportive contexts to support living sustainably.

Note: Personal, social and contextual, and structural factors affecting lifestyle consumption options

Source: Figure 6.3 from the United Nations Environment Programme (2020). Emissions Gap Report 2020. Nairobi.

As previously stated, life transitions can be stressful times, and when people feel like their priority needs aren't being met, they don't have the bandwidth to engage in pro-environmental behaviours that cost them more mentally, physically, and financially. This has significant implications for how critical it is to have adequate, enabling structural support in place to empower people to make the best decisions for the welfare of our planet and its inhabitants.

For example, the highest mitigation potential for consumers has been found to be transportation (99).Therefore. transportation is an important domain for interventions. However, when attempting to promote care-free living, it is not enough to constantly tell people that driving their vehicle significantly contributes to climate change. Interventions aimed at reducing car usage among people who just relocated to a new city are useless if the city's transport infrastructure does not support low-carbon mobility (98). Infrastructure that supports carbon-friendly lifestyles is only part of the solution; there also needs to be a range of policies and a legal framework in place to make using a car less appealing and other modes of transportation, such as public transit and cycling, more appealing. Moving towards car-free living requires a deep evaluation of the elements behind car travel as the default mode of transport in many Canadian cities.

Mattioli and colleagues identified five key elements that make it difficult to reduce car usage: the automotive industry, the provision of car infrastructure, the political economy of urban sprawl, the provision of public transport, and cultures of car consumption (100). Similarly, shifting to a battery electric vehicle (EV) requires a range of structural supports, such as networks of charging stations, economic incentives to purchase an EV, and social marketing aimed at increasing the public's perception of EVs (98).



Photo by Tom Dick on Unsplash

This also applies to a range of high carbon behaviours such as high meat diets and how homes consume electricity and gas ($\underline{99}$). The science on the co-benefits of adopting more plant-based diets on both health and climate change is clear ($\underline{101,102}$). Shifting to a plant-based diet is projected to reduce global mortality by millions of prevented deaths and a massive reduction in food related greenhouse gases. The economic implication on health care expenditure alone represents trillions of dollars saved by 2050 ($\underline{102}$). However, even though we've been hearing about the benefits of plant-based diets for years, a transition to more plant-based diets requires structural support in many areas, such as subsidizing vegetables instead of meat and dairy, making vegetarian meals the default option in places that have a cafeteria, restricting advertising for meat products and use culture and the media to promote more plant-based diets ($\underline{98}$). When a lot of people partake in campaigns such as Meatless Mondays, it can have important environmental benefits, even if it's one day a week. According to the Meatless Monday website, "If everyone in New York City chose a (soy) veggie burger instead of a $\frac{14}{100}$ lb. beef burger for Meatless Monday, it would save the equivalent CO_2 emissions from charging 2.6 billion smartphones" ($\underline{103}$).

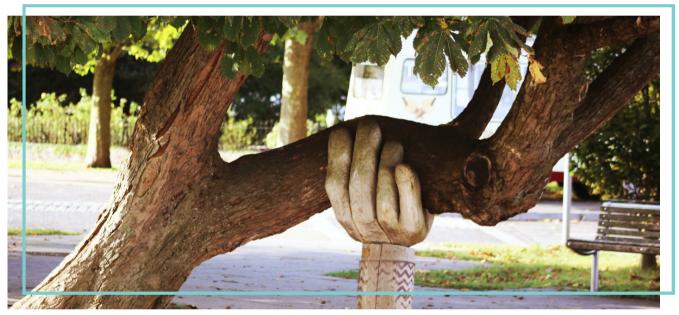


Photo by Neil Thomas on Unsplash

Homes are another important source of emissions. Structural support is needed to increase building standards toward energy efficient buildings, provide incentives for people to retrofit their homes and adopt renewable energy, and provide homes with smart meters that allow residents to track their energy use (98).

This further shows that individual behaviour-based interventions are simply not enough considering the structural elements that influence our lifestyles. That's because many actions that are beneficial to the environment require adequate infrastructure (1). Therefore, it is evident that structural support is not close to where it needs to be to reduce greenhouse gas emissions at the rate required for a liveable future, and as noted by Akenji and colleagues, policies and infrastructure investments often continue to make high-carbon behaviour and harmful consumption patterns the default (104).

Therefore, there needs to be immediate governmental action to support climate friendly ways of living and shift our institutions from barriers to enablers.

Example of University Institutional Support

To encourage students to use sustainable transportation, the British Columbian government and TransLink teamed up with BC universities. Students are automatically enrolled in the U-PASS program each semester. For a discounted fee, students can use public transportation as much as they want with their U-Pass BC card during the semester. Thanks to this partnership, the transit system can be used by approximately 140,000 post-secondary students (119). U-Pass BC students accounted for 35 million TransLink journeys in 2018, accounting for nearly 13% of TransLink's passenger journeys (120). The students have embraced this initiative. Students at the University of British Columbia voted in a referendum to keep the U-Pass program, and in 2019, 95% of students opted to take part (121).



oto by Sandy Ravaloniaia on Unsplash

Since attending university or college is a major life transition, it is a promising time to form new sustainable behaviour that can stick, even after graduation. In fact, a 2018 survey found that three years after graduation, more than half of graduates (54%) use public transportation at least once a week (122). This is significantly higher than the number of students who used public transportation before school (46%). Approximately 84% of students use public transportation at least once a week, and although 71% of graduates have access to alternative modes of transportation, they still choose to take transit. The U-Pass BC program has a significant impact on transit utilization, with 9 out of 10 current students believing it provides an incentive to take transit more frequently, compared to 81% of graduates. Students (51%) and graduates (38%), who used U-Pass BC as students, say that they are more likely to use public transportation after graduation. The top reason given for this increase is that they "gained familiarity with transit routes/became comfortable taking transit/got in the habit of taking transit" (122).

This example highlights how important institutional and infrastructural support can be as key players in supporting pro-environmental behaviours during times of transition. Having access to the bus pass from the start removes a lot of deliberation about what mode of transport to use. As shown by the data, it leads to a higher transit utilization rate even after graduation.

However, such programs are more successful when they are advertised to students months before they arrive on campus. Some students might decide to buy a car as they prepare for this new chapter. As a University of British Columbia student, I was unaware of the U-PASS program, or that I had paid for the pass until after the start of the semester. This is a missed opportunity, especially for students who are moving from other provinces and countries and may most likely not be aware of the program.

There is also a possibility to tap into cascading opportunities presented by life transitions to reduce some of the small drop in transit use after graduation. The program could be extended to recent graduates who are entering the job market. For example, if the pass were available to students for a few months after graduation, it could entice graduates to use transit as they are transitioning to the workplace. As mentioned, the first few months after a main transition event are critical. Therefore, extending the program a few months could maintain the transit habit, which could otherwise be lost due to the changing contextual cues associated with commuting to a new area and a new routine.

9/10 students

who used U-PASS feel it is an incentive to use transit more often

8/10 graduates

who used U-PASS feel it is an incentive to use transit more often

68% said

that gaining familiarity with transit routes/became comfortable taking transit/got in the habit of taking transit made them more likely to use transit after graduation

9. Moments shaped by Culture

Hard infrastructures, such as our built environments, are not the only type of infrastructure that plays a considerable role in influencing our lifestyles. Soft infrastructures, such as our habits, norms, and culture, also play a crucial role in shaping the way we live (105). As Akenji and Chen highlighted, "social and cultural institutions are custodians of culture and adherents to principles that propagate value systems, and hence are important in shaping values, social norms, and lifestyle choices" (17).

As discussed, social institutions such as our family, friends, and education system influence our behaviour. From the movies we watch to the books we read, cultural institutions have the power to shape our cultural experience. Marketing, for example, is constantly attempting to alter our consumption habits. Since most advertising dollars are spent on appealing to extrinsic values, which are associated with less motivation to address social or environmental issues, this can have a significant impact on how we live and consume (106). Nowadays, marketing is present on the majority of our social media platforms, so we are constantly bombarded with targeted ads designed to increase our consumption. This can also have an impact on our expectations of life transitions, as marketing frequently targets people in transition (e.g., back to school discounts).

Additionally, daily exposure to peer-generated social media content affects how people consume. This may result in overconsumption and the romanticization of consumption-based lifestyles. Social media can thus be an obstacle to more sustainable consumption, even for consumers who already practice sustainable consumption, as advertisements or other content may encourage the purchase of eco-friendly products that the user does not need. As explained by Frick and colleagues, "Online environments adapt to their users through personalization, leading to positive feedback loops in which online environments shape motivations and behaviors of the users while the users' behaviors shape the way the Internet presents itself to them" (136). However, there is also a push on social media to condemn excessive consumption and advocate for more environmentally friendly ways to consume (137). Consequently, social media can be both a barrier and a facilitator for pro-environmental behaviour.



Art is also a powerful vessel for social change. As Time Jones, founder of Artscape explains: "Art plays a crucial role in shaping and renewing culture: it can shine a spotlight on truth, create moments of joy or inspire us to act. In times like these, we need to empower artists like never before to help us reflect, to rekindle our hope and to imagine a better future" (107).

Engaging with art can also be healing, and has a positive effect on our well-being (108,109). Therefore, art may be a particularly important tool during life transitions for enhancing wellness as well as providing a canvas for individuals to share the stories they want to share. Engaging people about the environment through the arts can help them find new connections with nature, as opposed to the conventional informational method of learning that is often detached from nature (110).

As Fivush highlights, "just as our individual narratives are shaped by cultural and historical models of selves and lives, individuals come to shape their culture and their historical moment by the stories they tell" (111).

Berntsen and Rubin define a life script as culturally defined transitional events that are anticipated to occur within a specific age span (112). Hence, culture plays a huge role in how we imagine our lives will unfold (our life script), and deviations from that script can be difficult. Culture also plays a role in the way these transitions unfold. Wolin and Bennett define family rituals as "consisting of celebrations, traditions, and patterned family interactions" (113). They can take the form of daily or weekly rituals, such as Meatless Mondays, but they can also mark a major moment in life (114). Culture comes with certain rituals that may mark some normative life transitions. These rituals can be important parts of live transitions by providing anchor points during transitions (114).

However, many of our celebratory rituals are associated with high consumption behaviours. For example, the ritual of getting married is often a big event that is planned months, if not years, in advance. Typically, not only the bride and groom but also the people in attendance must spend considerable resources, both financial and environmental, to participate in the festivities. For example, the effect of culture and modernization is changing Malay weddings. Traditional weddings, which are anchored in religion and frugal values, are being pushed aside for a new trendiness for high-cost, high consumption weddings (115).



Photo by Al Elmes on Unsplash

Also, we tend to consume more than usual during the Christmas season. From food to gifts, holiday festivities have a significant effect on the environment. In fact, a 2007 Stockholm Environment Institute report estimated that the total consumption and spending on food, travel, lighting, and gifts during the three days of Christmas festivities account for around 5.5% of the total annual carbon footprint in the UK (116).

However, despite the fact that rituals are often associated with large environmental footprints and that culture, and the media play a significant role in shaping our expectations of rituals, there is a movement and opportunity to make these rituals greener (117,118). It is evident that our culture and life transitions influence one another, and that this can influence our consumption patterns. Adopting more sustainable lifestyles necessitates a re-evaluation of how our culture influences our life transitions, as well as the development of new rituals rooted in better living for people and the environment.

10. Possible Support Agents are Everywhere

Given the difficulty in identifying people who are about to embark on a life transition, collaboration with key support agents that are relied upon during these changes could be a useful option. Additionally, since some normative transitions are typically common in certain stages of life, those transitions are easier to target through support and interventions. Having significant strategic allies at many checkpoints in people's lives can help make these transitions more sustainable.

Some life transitions, such as becoming a parent, might be linked to lower levels of sustainable behaviour (24). Providing resources that might be required by those going through life changes in collaboration with support personnel can be a helpful strategy for promoting more sustainable behaviour. A care provider, such as a midwife, an online group for new parents that promotes sustainable living, or scheduled workshops where new parents can learn how to prepare baby food while also getting to know other mothers are all possible sources of support. Businesses and services can also offer support, such as stroller rentals or healthy local food services.

For example, as discussed, going to university can be a difficult experience for some, as it forces students to reevaluate who they are. However, there are so many opportunities for support in universities. Career advisors, professors, counsellors, student associations, and student councils are all examples of people or groups that can provide valuable support to students. Universities have a responsibility to help new students transition by engaging them in groups focused on sustainability to promote new social memberships that benefit their well-being while also fostering social norm change. They should also make pro-environmental food, waste, and mobility choices the default.



Photo by CDC on Unsplash

Similar options are possible for newcomers to Canada. Organizations, communities, and neighbours can serve as support agents to help these individuals adapt to their new lives, while also being exposed to people who live more sustainable lifestyles. Immigration support services and municipal programs can support newcomers in setting themselves up for climate-friendly living and adopting low-carbon everyday practices.

One way to do this is to help businesses build support programs with incentives that encourage and equip support agents to recommend services and actions that help both the environment and the person going through a transition. Businesses can help people make their transitions more sustainable by partnering with sharing economy services and support agents. For example, partnerships that can be formed with support agents and sharing economy services for various life events.

These are only a few of the support agents that may be involved; there are many others, such as wedding planners, retirement home staff, and career counsellors. These professionals can provide assistance and direction to individuals during significant life events or transitions, and their expertise can be invaluable in facilitating the successful navigation of these changes. Whether a person is planning a wedding, preparing for retirement, or seeking a new career path, support agents can provide valuable advice and assistance on adopting more environmentally friendly lifestyles.

Imagining New Ways: Spotlight on Fashion

With the increase in fast fashion, people are buying more clothes, and a lot of it ends up in landfills (123). Fast-changing fashion trends, boredom, and closet cleaning are important reasons for divers to dispose of clothing, especially for women (123,124). This is significant, as the apparel and footwear industries were reported to account for approximately 8.1% of global greenhouse gas emissions, and this is expected to increase by 49% if textile consumer habits are not altered (125). As a result, life transitions may be a favourable moment to reconsider one's relationship with owning clothing, and instead participate in the sharing clothing economy. Such services allow people to enjoy a changing wardrobe and provide them with access to higher quality clothing, while also reducing the environmental burden associated with clothing production and consumption.



An example of such partnership could exist between midwives and companies like Grokinder, Tradle and Upchoose that rent out baby clothes monthly. When clothes no longer fit, the season changes or they want variety, the parents send them back and get new ones. Informing parents of this option shows them other ways to have and dispose of baby clothes. This can help cut down on waste and pollution caused by making and getting rid of these items, and it also gives parents a service that makes it easier to keep up with an infant's clothes as they grow quickly. As a result, ensuring support for a sustainable economy during this period is critical to reducing GHG emissions. So, by giving babies circulated clothing and other eco-friendly options, parents can have a direct impact on reducing their carbon footprint, while also making the transition to parenthood easier.

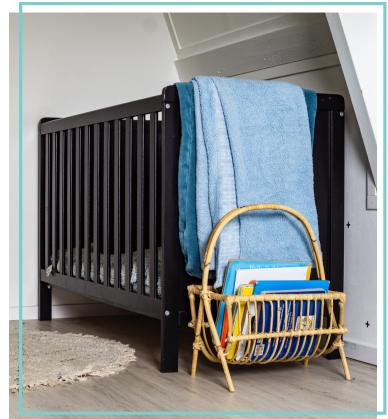


Photo by Sven Brandsma on Unsplash

A circular clothing acquisition system does not have to be limited to infant clothing. During a pregnancy, a prospective mother requires clothing to accommodate the growing fetus. Rather than purchasing maternity clothing that they may never wear again, renting it through such a service may be a more cost-effective, timesaving, and environmentally conscious option. Also, these types of services could be suggested by wedding planners so that the couple can promote them on their wedding website. This might save visitors the expense of purchasing expensive clothing that they may not want to wear again. A survey conducted by OnePoll for Affirm in March 2022 found that the average American was invited to four weddings in 2022, with the average consumer spending up to \$3,000 per wedding (126). 2022 was a busy year for weddings because of the COVID-19 epidemic; however, these data show the need to help wedding guests embrace eco-friendly and cost-effective clothing choices. The cost of wedding guest attire is a burden for those attending multiple weddings. This practice is already popular in India, where sharing represents an important part of Indian culture (127).

Colleges and universities could also market these services on campus. Students who frequently move to attend a new school might have access to a rotating wardrobe that allows them to always have access to new clothes without accumulating clothing that they might need to dispose of when they return home. These types of partnership support people through change by making sustainable choices easier.

In addition, community initiatives can be implemented to facilitate resource sharing for people going through a certain life transition. In fact, research shows that sharing practices can strengthen ties and trust in an enterprise or local community, and that community-sharing systems built on values relating to sustainability transformation can help elicit deeper levels of changes (128).

Guidelines to Support Life Transition

Taking Advantage of the Window of Opportunity

- Provide interventions aimed at pre-planning, during, and post phases to take advantage of the window of opportunity caused by habit discontinuity.
- Take advantage of the high disruption of overlapping transitions for more profound lifestyle changes.
- Design interventions that continue across life transitions to reinforce a practice (e.g., university and workforce transitions).
- Encourage a 'whole lifestyle' approach by targeting several aspects of people's lives.

Taking Advantage of the Social Context

- Utilize people's social support and help foster new ones.
- Help individuals identify new groups that align with their values and interests and encourage them
 to participate in activities that can help them integrate into these groups while also promoting lowcarbon living.
- Take advantage of cohort or household-based interventions, where group actions are possible toward a common sustainability goal.
- Engage people through classes and workshops to foster learning and capacity building on a deeper level and encourage collective learning.

Shifting Identities/ Culture

- Create transformative moments through experiences in nature to shift identity narratives towards sustainable living.
- Engage people going through a certain transition using art to increase healing, well-being and foster a connection with nature.
- Use social media posts and influencers (particularly those associated with specific transitions) to shift consumption norms toward more sustainable practices.
- Be mindful of cultural messaging that impacts behaviour, such as marketing, and use it to increase public perception of more planet friendly ways of living.
- Consider transitions relating to cultural rituals, and find ways to make these moments less consumption based, and more experience and relational based.

Providing Support

- Tailor support and interventions to specific life transitions, while also tailoring to groups' or individuals' specific needs and situations. Everyone goes through life transitions, but everyone experiences them differently due to personal and socio-economic factors.
- Provide readily available and easily accessible tools to increase the perceived support available to people (e.g., websites for specific life transitions).
- Make sure there is adequate structural support (e.g., enabling policies, markets, technologies, and infrastructure) to help people transition between moments, and to sustainable ways of living.
- Evaluate and address the key elements that make it difficult to adopt certain behaviours and create structural support that addresses those barriers.

Individuals, communities, organizations, and governments can work together to take advantage of life transitions, in combination with more structural changes, to increase resilience, implement sustainable practices, and alter cultural norms toward climate-friendly living.

Closing Reflections

Life transitions are periods of change, uncertainty, societal needs, cultural rituals, and identity shifts. They are periods of opportunity to reshape transitions and post transition lives. They can drain both mental and physical resources, making pro-environmental actions more challenging. However, with the right kind of societal support, they are opportunities to transform moments of high consumption and stress into beneficial alternatives that embed low-carbon habits and promote well-being. They are opportunities to influence "linked lives," how people are influenced by social groups, and how society normalizes behaviours. They are opportunities to tap into cultural moments when people are shaping their narratives and identifying wants, needs, aspirations, and communities. As a result, now is the moment to rally support from all levels of society. Individuals, communities, organizations, and governments can work together to take advantage of life transitions, in combination with structural changes, to increase resilience, implement sustainable practices, and alter cultural norms toward climate-friendly living.



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