

EMPOWER ME - SOCIAL DESIGN INNOVATION FOR HOMELESS FAMILIES: COLLECTIVE DESIGN CREATIVITY

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Abstract: Design Creativity has largely been explored as an individual expression of design cognition rather than as the collective manifestation of interaction in context. Recent approaches to design with an emphasis on co-design suggest that the problem-solution space co-evolves through social interaction. Socially Responsive Design for Social Innovation constitutes the most recent and perhaps the most promising domain of application for design thinking practices that emphasize collaborative innovation. In this paper, we describe the ideation of a service design solution for homeless families (Em.power.me), developed through consultation with a range of stakeholders over a three month period. This service design innovation aimed to visualise how such a service would operate and identify the potential benefits for all stakeholders. We focus here on the phases leading to the ideation of the service design.

Keywords: *homelessness, design thinking, socially responsive design*

1. Introduction: Design Creativity, Collaboration, and Social Innovation

Design Creativity has been the subject of research and discussion for some time with the prevailing approach being linked to the study of individual creativity as a cognitive phenomenon. In one of the earliest empirical studies Oxman (1990) described the function of prototypes, analogy, and long and short term memory in producing creative design responses. More recently, Gero (e.g. 1996) has proposed a range of computer models of the creative design process and the emergence of creative solutions. In general the idea that problem and solution coevolve through the design decision and creativity space is widely accepted (Dorst & Cross 2001).

1.1 Collective Creativity

More recently, there has been a turn towards collective creativity as a key phenomenon in design spaces. Shaw (2010), for example, attempts to supplement existing individualistic cognitive accounts (e.g. Oxman 1990) with collective constraints, arguing that visual thinking and media for external representation must be matched with modes of collective emergence. Maher, Paulini & Murty (2011) signal the importance of 'scaling up' in the move from individual to collective creativity with support from computer technology. Svihla (2010) studied engineering design teams and modelled through social network analysis the factors which encouraged greater creativity in design responses from collective teams. The author found that teams having innovative initial design plans, higher microscale design skills of perspective-taking and higher team cohesion, tended to produce more

innovative final designs. These studies and others suggest but do not develop the idea of joint creativity in design as the result of users and designers working together. Co-design, however, offers a way of connecting design creativity with collective design processes.

1.2 Co-design and Social innovation

Saunders & Stappers (2008) identify collective creativity through co-design as the newest space for current design work. The relationship between co-creation and co-design, they explain as follows;

The authors take co-creation to refer to any act of collective creativity, i.e. creativity that is shared by two or more people. Co-creation is a very broad term with applications ranging from the physical to the metaphysical and from the material to the spiritual, as can be seen by the output of search engines. By co-design we indicate collective creativity as it is applied across the whole span of a design process ...Thus, co-design is a specific instance of co-creation. Co-design refers, for some people, to the collective creativity of collaborating designers. We use co-design in a broader sense to refer to the creativity of designers and people not trained in design working together in the design development process. (p.6)

Service design, one of the more recent manifestations of design practice, depends for success on collective research and prototyping at every stage for success (Steen, Manschott & Koning 2011). Employing characteristic design thinking tools and methods, including personas, customer journeys, etc., Service design interactions capture the collective generation of solutions in interim tools and visualizations. While service design has been predominantly used in commercial and industry contexts, like design thinking approaches it lends itself well to social innovation spaces

1.3 Social Innovation: a new space for design thinking

Social innovation is 'innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly diffused through organizations whose primary purposes are social' Mulgen (2006, p.146). It has recently become a greater focus in design fields, where it aims to harness the same skills now being employed for business into non-profit domains. Brown & Wyatt (2010), illustrating with examples from IDEOs involvement with disadvantaged communities claim, 'Businesses are embracing design thinking because it helps them be more innovative, better differentiate their brands, and bring their products and services to market faster. Nonprofits are beginning to use design thinking as well to develop better solutions to social problems. Design thinking crosses the traditional boundaries between public, for-profit, and nonprofit sectors' (p.32). Despite the label and given the spread of design thinking into a range of domains, such projects are inherently multidisciplinary and not the least confined to designers, whose traditional skills are challenged by such approaches (see Kimbell 2011)

Social innovation through design employs a range of methods and tools, to help prototype and help visualise the innovation. Morelli (2007), for example, discusses the range of tools and considerations that must be employed in current socially responsible design projects to engage all stakeholders in sustainable solutions. Referring to Cooper (2010), we note (Melles, De Vere & Misic 2011) the emergence of socially responsive design in the UK, as an approach seeking to employ social innovation approaches to the collaborative solution of urban industrialized problems. Spurred on by a design competition focussing on homelessness, [RMIT Homeless Challenge](#), a simultaneous concern with social innovation, socially responsive design and belief in the co-design process motivated our attempt to develop a service design solution for the homeless in Melbourne. The collective generation of the solution took place with designers, social researchers with expertise in the area, and members of a local city mission with responsibilities in this area.

2. Homelessness & families: a social and design problem

Homelessness is a global phenomenon, whose causes and effects are still only partly understood (Shlay & Rossi 1992). Homelessness in urban industrialised settings has emerged as policy makers have been unable to cope with a reduced private rental sector and demographic changes in the last few decades (Wolch, Dear & Akita 1988). Families with children constitute the fastest growing group of

people at risk of homelessness or already so. Poverty, violence and damaged self-esteem and identities have long been known to be contributing factors (e.g. Bassuk 1986).

2.1 Cliches

In many respects the overall population and particular groups remain hidden for the public behind clichés, and negative identities ascribed to this group (Parsell 2011). It is important that such clichés are addressed in policy and service responses. In addition to overcoming clichés, indiscriminate treatment of the distinctive groups, e.g. homeless men, women and families, as an undivided whole – the homeless, diverts attention from particular needs and aspirations (Burt & Cohen 1989). This is now recognized in most policy and agency support policies and strategies.

2.2 Effects on families

The physical and mental health of women and children at risk or in homeless situations is a serious under-resourced problem (Lewis, Gelberg, Anderson 2003; O’Toole et al. 1999). Women in temporary or shelter situations report much higher stress levels than those who are in more stable housing (e.g. Banyard & Graham-Bernard 1998). The need for psychological and health support services for mothers and children has also been highlighted in Melbourne particularly (Efron et al. 1996). As they face the ‘double crisis’ of homelessness and child rearing (Hausmann & Hammen 1993), such women rely less on social networks and are more isolated as a result (Bethany, Letiecq, Latinsky 1996). Engendering hope in such circumstances requires active intervention from all stakeholders (Herth 1996). In the face of significant difficulties and trauma, however, such women often demonstrate significant resilience and pride (e.g. Banyard & Graham-Bernard 1995; Casey, Goudie & Reeve 2008; Thrasher & Mowbray 1995). Following more permanent housing, Tischler (2008) notes, for example, that despite exposure to major stressors, most women had begun the process of resettlement by improving their physical surroundings, achieved personal growth as they had managed to escape violence, and create new opportunities for themselves and their children.

2.3 Early intervention and prevention works

A critical period for homeless families and socially disadvantaged at risk is at the earliest stages. Family preservation and stabilization has been shown to be enhanced through housing assistance (e.g. vouchers), better case management and other services (Bassuk & Geller 2006). In the USA, for example, early intervention and service-enriched housing, i.e. stable housing enriched with a wider range and coordination of services, have produced good results, leading to family stability in a time of crisis (Rog, Holupka, McCombs-Thornton 1995; Weinreib & Bucker 1993). The notion of integrating housing and services for low-income at risk groups is increasingly being recognized as the key strategy to prevent homelessness (Cohen et al 2004). Complementary services, including advocacy and financial advice, have long included the support of non-profit agencies with a religious basis or mission, and effectively complement other government funded sources (see Cohen et al 1991; Johnson & Castengera 1994). The long-term benefits of early intervention may arrest the gravity of certain consequences although total economic independence may not always be achieved (Shlay 1994). Tischler et al. note that additional support, e.g. counselling in the early crisis period, needs to continue following more permanent housing being obtained (Tischler 2004; Tischler et al. 2007). A range of commentators have pointed to the need for better coordination of services and (not-for-profit) agencies in better addressing homeless family needs and so-called interorganisational relationships (IORs) (Jaskyte & Maskw 2006).

2.3 Australia

In Australia, roughly one quarter of all homeless are families with children, largely headed by women who are often escaping violence. Whether these women have received emergency housing or manage to stay in the family home, they and their children face many hurdles in achieving stability and beginning a new life. Government agencies and NGOs provide much needed support at this time in the form of financial and other help, e.g. rental assistance. Research notes, however, that the earliest stages of homelessness are crucial, that coordination between services and agencies is not ideal, and that the support of business and individuals could be better aligned with other sources.

Studies of homeless in Victoria in particular show different groups spread unevenly in communities and across the state, largely in transitional accommodation (Victoria Government 2010). A range of government and other stakeholders participate in addressing the needs of these groups and locations although coordination among and across these stakeholders is not optimal.

In Australia specifically, state and federal governments have produced mission statements allying projects aimed at homeless with government funding. The Victorian Government 2020 Strategy, for example, identifies the need for overall better service provision and identifies a range of existing innovative projects addressing specific subgroups. They note overall the need for government, community sector, business and philanthropy to work together (Victorian Government DHS 2010). Specific programs, aiming at early intervention with families have already proved successful, including the The Family Homelessness Prevention Pilot (FHPP), which was piloted in eight sites (one in each state and territory) over a two-year period and operated on a service partnership model, with Centrelink and community service providers funded to work collaboratively (RPR Consulting 2005). Other successful interventions have included The Family Makeover Project, (Cooksin, Cummins & Associates 2005), and the Uniting Families Project, which focussed especially on managing effects in young people through better support and coordination with schools and parents (UnitingCare 2005).

3. Service design innovation

In the first stage of our work we gathered and analysed the relevant literature and government reports to better understand the problem facing urban homeless in Victoria. Unlike many other design responses we had seen which assumed homelessness was primarily a phenomenon affecting individual lives on the streets, a less visible group turned out to be important. McKenzie & Chamberlain (2006) have noted an increase in women with children in homeless statistics compared to 2001. More specifically, they show that when accurately calculated, 'Families were 10% of all homeless households, but they included one-quarter (26%) of the homeless population' (p.viii, 2006), totaling 26,790 people (10,608 parents and 16,182 children).

Early discussion with colleagues at the Institute for Social Research helped clarify some of our assumptions and redirect the project. We discovered that despite the fact that individual donation and business sponsoring of goods and services to Homeless groups often mediated by agencies, such as the Salvation Army, has provide critical in addressing injustices, no specific service design model coordinating individual and business philanthropy with agency intervention and government support for a distinct group – at risk and homeless women and children exists. In addition, NGOs currently addressing needs have a broad mandate in supporting individuals and families through social disadvantage, where homelessness is only one issue in their mandate, and homeless families also only a single issue. We aim to capture the philanthropic sentiment in the public and business and direct it specifically at a growing need in Victoria and Australia.

According to Lindsey (1997), homeless families with children, go through three stages as shown in Figure 2: Meeting Immediate Family Needs; Creating a New Home; and Maintaining Family Stability. At each stage there is scope for business and individuals to help supplement existing support mechanisms. This became an important framework for our proposals, validated outside of design. We adopted a three stage process consistent with design thinking models (e.g. Brown 2008) to generate solutions. The proposals we put forward address the first two phases in figure three and we are currently searching for financial sponsors for prototyping into implementation.

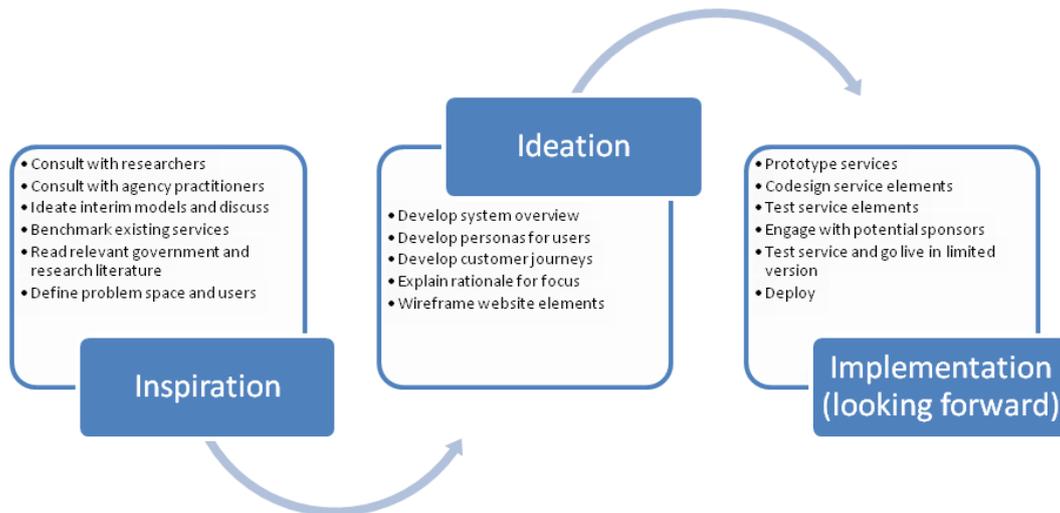


Figure 1: Three Stage Co-creation Process

In addition to exploring the problem-solution space with a range of stakeholders and users, personas for the different stakeholders were collectively generated, and also a service system visualised as shown below. The personas, customer journey and also the service blueprint were all generated in joint discussions with stakeholders. This moved the original product oriented solution to a service oriented solution that integrated exiting research literature and the needs of stakeholders and users. This particular outcome was never envisioned at the start of the project where rather an mobile recharge station for users was put forward to Homeless Challenge. Collective innovation meant here gradually moving away from this product focus to a real service design gap for social innovation.

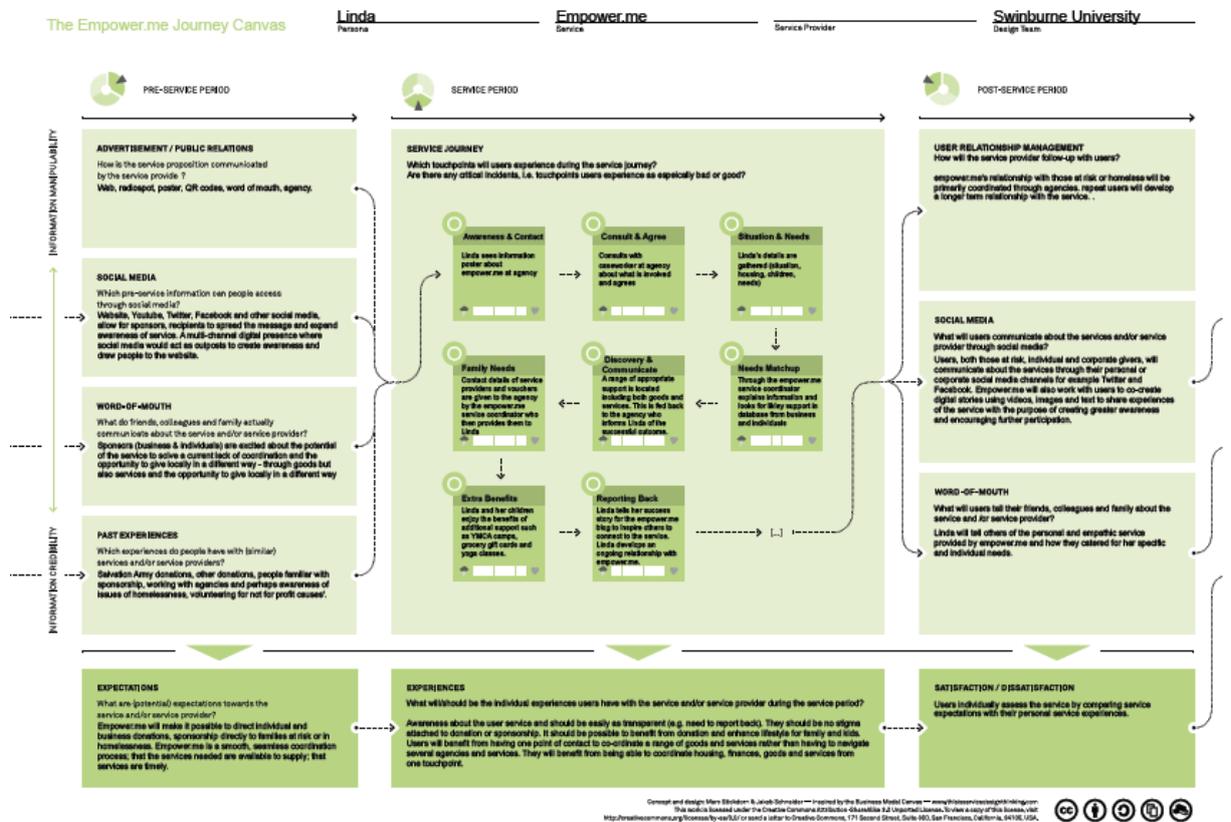


Figure 2: Customer Journey

4. Discussion

There has been a gradual move towards recognizing socially situated collective co-creation as the source of much design creativity and solutions. Social innovation is one of the newest areas of application for design approaches and depends on participation for success. We illustrated here how collaborative creativity engaging multiple stakeholders generates a service innovation that, we argue, depended on collaboration for its success and *raison-d'être*. Design creativity here, then is dependent on multiple perspectives informing a process, which leads to concrete service or other outcomes. We suggest that co-design approaches such as these be the focus of work in design creativity in the future.

References

- Banyard, V. L., & Graham-Bermann, S. A. (1995). Building an empowerment policy paradigm: Self-reported strengths of homeless mothers. *American Journal of Orthopsychiatry*, 65(4), 479-491.
- Banyard, V. L., & Graham-Bermann, S. A. (1998). Surviving poverty: Stress and coping in the lives of housed and homeless mothers. *American Journal of Orthopsychiatry*, 68(3), 479-489.
- Barrow, S. M., & Laborde, N. D. (2008). Invisible Mothers: Parenting by Homeless Women Separated from Their Children. *Gender Issues*, 25(3), 157-172.
- Bassuk, E. L. (1986). Homeless families: Single mothers and their children in Boston shelters. *New Directions for Mental Health Services*, 1986(30), 45-53.
- Bassuk, E. L., & Geller, S. (2006). The role of housing and services in ending family homelessness. *Housing Policy Debate*, 17(4), 781-806.
- Bethany L. Letiecq, E. A. A., & Koblinsky, S. A. (1996). Social Support of Homeless and Permanently Housed Low-Income Mothers with Young Children. *Family Relations*, 45(3), 265-272.
- Burt, M. R., & Cohen, B. E. (1989). Differences among Homeless Single Women, Women with Children, and Single Men. *Social Problems*, 36(5), 508-524.
- Casey, R., Goudie, R., & Reeve, K. (2008). Homeless Women in Public Spaces: Strategies of Resistance. *Housing Studies*, 23(6), 899-916.
- McChesney, K. Y. (1995). A Review of the Empirical Literature on Contemporary Urban Homeless Families. *Social Service Review*, 69(3), 429-460.
- Chamberlain & McKenzie (2006). ACAP (Australia Census Analytic Program) Counting the Homeless Australia 2006. ABS.
- Cohen, E., Mowbray, C. T., Gillette, V., & Thompson, E. (1991). Preventing Homelessness. *Prevention in Human Services*, 10(1), 169-185.
- Cohen, C. S., Mulroy, E., Tull, T., White, C., & Crowley, S. (2004). Housing plus services: Supporting vulnerable families in permanent housing. *CHILD WELFARE-NEW YORK*, 83(5), 509-528.
- Cooksin, Cummins & Associates. (2005). Family Makeover Project Report. October. Sydney, NSW. Available at http://www.fahcsia.gov.au/sa/housing/pubs/homelessfamilies/wesley_mission/Documents/fam_makeover_wesley_mission.pdf
- Dorst, K., & Cross, N. (2001). Creativity in the design process: co-evolution of problem-solution. *Design Studies*, 22(5), 425-437. doi:10.1016/S0142-694X(01)00009-6
- Efron, D., Sewell, J., Horn, M., & Jewell, F. (1996). Children in homeless families in Melbourne: health status and use of health services. *Medical Journal of Australia*, 165(11-12), 630-633.
- Gero, J. S. (1996). Creativity, emergence and evolution in design. *Knowledge-Based Systems*, 9(7), 435-448. doi:10.1016/S0950-7051(96)01054-4
- Hausman, B., & Hammen, C. (1993). Parenting in homeless families: The double crisis. *American Journal of Orthopsychiatry*, 63(3), 358-369.
- Herth, K. (1996). Hope from the perspective of homeless families. *Journal of Advanced Nursing*, 24(4), 743-753.

- Jaskyte, K., & Masw, M. L. (2006). Administration in Social Work Interorganizational Relationships Interorganizational Relationships : A Source of Innovation in Nonprofit Organizations ? Administration In Social Work, 30(3), 43-54.
- Johnson, A. K., & Castengera, A. R. (1994). Integrated Program Development: A Model for Meeting the Complex Needs of Homeless Persons. Journal of Community Practice, 1(3), 29-47.
- Kimbell, L. (2011). Rethinking Design Thinking: Part I. Design and Culture, 3(3), 285-306. doi:10.2752/175470811X13071166525216
- Lewis, J. H., Andersen, R. M., & Gelberg, L. (2003). Health care for homeless women. Journal of General Internal Medicine, 18(11), 921-928.
- Lindsey, E. W. (1997). The Process of Restabilization for Mother-Headed Homeless Families: How Social Workers Can Help. Journal of Family Social Work, 2(3), 49-72.
- Maher, M. L., Paulini, M., & Murty, P. (2011). Scaling Up: From Individual Design to Collaborative Design to Collective Design. In J. S. Gero (Ed.), (pp. 581-599). Springer Netherlands. doi:10.1007/978-94-007-0510-4_31
- Melles, G., Vere, I.D. & Mistic, V. (2011). Socially responsible design: thinking beyond the triple bottom line to socially responsive and sustainable product design. CoDesign, (November 2011), 37-41.
- Morelli, N. (2007). Social Innovation and New Industrial Contexts: Can Designers “Industrialize” Socially Responsible Solutions? Design Issues, 23(4), 3-21.
- Mulgan, G. (2006). The process of social innovation. Innovations: technology, governance, globalization, 1(2), 145-162.
- O’Toole, T. P., Gibbon, J. L., Hanusa, B. H., & Fine, M. J. (1999). Utilization of health care services among subgroups of urban homeless and housed poor. Journal of Health Politics, Policy and Law, 24(1), 91-114.
- Parsell, C. (2011). Homeless identities: enacted and ascribed(1). The British Journal of Sociology, 62(3), 442-61.
- Oxman, R. (1990). Prior knowledge in design: a dynamic knowledge-based model of design and creativity. Design Studies, 11(1), 17-28. doi:10.1016/0142-694X(90)90011-Z
- Rog, D. J. (1999). The Evaluation of the Homeless Families Program. American Journal of Evaluation, 20(3), 558-561.
- Rog, D. J., Holupka, C. S., & McCombs-Thornton, K. L. (1995). Implementation of the Homeless Families Program: 1. Service models and preliminary outcomes. American Journal of Orthopsychiatry, 65(4), 502-513.
- RPR Consulting, (2005). Family Homelessness Prevention Pilot: Final Evaluation Report. Commonwealth Department of Family and Community Services, ACT.
- Sanders, E., & Stappers, P. J. (2008). Co-creation and the new landscapes of design. CoDesign, 4(1), 5-18. doi:10.1080/15710880701875068
- Shlay, A. B. (1994). Running on empty: Monitoring the lives and circumstances of formerly homeless families with children. Journal of Social Distress and the Homeless, 3(2), 135-162.
- Shlay, A. B., & Rossi, P. H. (1992). Social science research and contemporary studies of homelessness. Annual Review of Sociology, 18(1992), 129-160.
- Shlay, A. B. (1994). Running on empty: Monitoring the lives and circumstances of formerly homeless families with children. Journal of Social Distress and the Homeless, 3(2), 135-162.
- Steen, M., Manschot, M., & Koning, N. D. (2011). Benefits of Co-design in Service Design Projects. International Journal of Design, 5(2), 53-60.
- Tan, S., & Melles, G. (2010). An activity theory focused case study of graphic designers’ tool-mediated activities during the conceptual design phase. Design Studies, 31(5), 461-478. doi:10.1016/j.destud.2010.05.002
- Tischler, V., Karim, K., Rustall, S., Gregory, P., & Vostanis, P. (2004). A family support service for homeless children and parents: users’ perspectives and characteristics. Health & Social Care in the Community, 12(4), 327-35.
- Tischler, V., Rademeyer, A., & Vostanis, P. (2007). Mothers experiencing homelessness: mental health, support and social care needs. Health & Social Care in the Community, 15(3), 246-53.

Tischler, V. (2008). Resettlement and reintegration: Single mothers' reflections after homelessness. *Community, Work & Family*, 11(3), 243-252.

Victoria Government Department of Human Services. (2010). *A Better Place Victorian Homelessness 2020 Strategy*. Victoria. Melbourne.

Wolch, J. R., Dear, M., & Akita, A. (1988). Explaining Homelessness. *Journal of the American Planning Association*, 54(4), 443-453.