

THE EFFECTS OF CHANGES IN BRAZILIAN HOUSING POLICIES IN A HOUSING PROVISION AND URBAN REGENERATION PROJECT IN PORTO ALEGRE, BRAZIL

Author:

DR. LUCIANA I. G. MIRON¹; LAURA MARQUES¹; DEYVID MONTEIRO¹, AND DR. IOANNI DELSANTE².

Institution:

¹FEDERAL UNIVERSITY RIO GRANDE DO SUL (UFRGS)

²UNIVERSITY OF HUDDERSFIELD

INTRODUCTION

In Brazil, the trajectory of housing provision has been fragmented, marked by a diversity of housing programs. This situation prompted the spraying of resources, and the frequent discontinuity of such programs.

Since 2002 Porto Alegre developed the “City Entrance Integrated Program” (PIEC in portuguese), a large housing provision and urban regeneration project, influenced by the housing program “Habitar Brasil BID”. There is evidence, also through Post Occupancy Evaluations delivered since 2006, that PIEC program produced positive outcomes, but also some shortcomings.

As the program is still in development, it will be probably influenced by the guidelines of another housing program developed since 2009 by the Central Government in the meanwhile, and named “My Home My Life Program” (MCMV - in Portuguese). This program produced more than 1 million homes on its initial phase, and 2 million homes on its second phase. Despite MCMV represents a landmark, studies have been pointing to problems to what has been produced through this program, including the lack of fulfilment of the needs of residents, mainly when one considers the common spaces.

The paper presents the results of a focus group conducted with Porto Alegre Council staff, responsible for the development of the PIEC housing projects. The results of POEs in PIEC housing projects were compared with POEs in MCMV housing projects and used as starting point to focus group. The findings indicated that the discontinuity of housing policies could affect the benefits generated by previous programs, especially related to community engagement.

THE CITY ENTRANCE INTEGRATED PROGRAM (PIEC)

In 2002, started ‘The City Entrance Integrated Program’ (PIEC in portuguese), a large housing provision and urban regeneration project in Porto Alegre, south of Brazil, which represents 1.75% of the city area (8,71km²) and 12.55% of the city housing deficit (14,700 people)¹. It targets a large area included in the 4th District, where several irregular settlements of families coming from the countryside were already established², occupying spaces once designated to the implementation of

new roads and the enlargement of existing ones³. The PIEC Program main goal is to improve the quality of life of the population⁴. It was influenced by the housing program ‘Habitar Brasil BID’ which privileged the institutional development of municipalities and community participation in the development of housing projects.

Post-occupancy evaluation outcomes

From 2006 to 2015 a number of post-occupancy evaluations (POE) studies have been carried out at PIEC allowing identify good practices and problems generated by PIEC housing projects⁵.

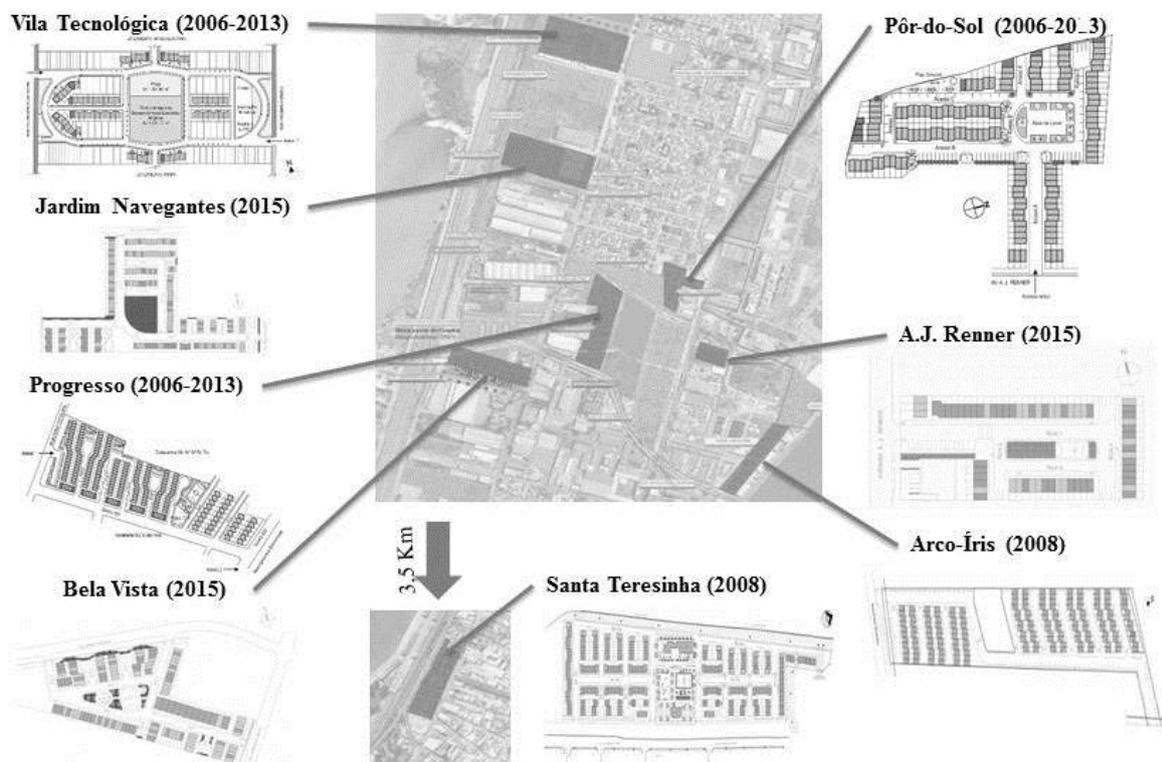


Figure 1 – part of PIEC master plan with housing projects and POEs delivered (dates in brackets).

The POE indicates that there are features with very high levels of satisfaction: urban services (infrastructures) are the most significant, followed by urban area features and their collective equipment⁶. There are also meaningful shortcomings related to a lack of parking spaces, problems with safety and housing unit features such as kitchen and stairs. The retention rate has also been identified as a key issue in some areas, as in some areas the retention rate has fallen significantly⁷. There is also some evidence that preferences and satisfaction are site specific, and not shared by different areas (e.g. security).

More recent analysis delivered with the laddering techniques allowed to evidence the more abstract levels present in the perception of users residing in PIEC area. Through this search technique it was possible to identify the cognitive chain most significant to users is the urban services (infrastructure)⁸.

trajectories of Brazilian housing government programs due to both the large scale of funding, its coverage area - with the construction in all states of country - and the high numbers of yielded housing unit (more than 1 million homes on its initial phase, and 2 million homes on its second phase). According to program guidelines, the goal would be a high priority to low-income families, which represent the bulk of the housing deficit.

However, even considering the housing deficit reduction, studies indicate that the program outcomes are far away from those initially proposed, particularly as regards the: difficulty in serving the low-income population, peripheral location, lack of infrastructure and services, excessive standardization of buildings, unsuitable areas, and house-building projects with large dimensions¹³. In addition to size of the projects, many of them are registered as private condominium (similar to gated communities), resulting in the establishment of common private areas¹⁴.

A post-occupancy evaluation developed in low-income projects built by MCMV in São Leopoldo (Porto Alegre metropolitan area) identified the valuation of features related to management on common areas, rather than characteristics related to constructive quality or architectural project¹⁵. The data of the research were collected in three different projects in the years 2014 and 2015.

These evaluations show that the privatization of common areas leads to a gap between public services and low-income population, which has difficulties in to manage their private common spaces. When spaces became private, the state is no longer responsible for the management and the costs of these areas, making them the responsibility of a poor population, dependent on public benefits to stay, and with little preparation for life in common.

The most valued features by users referred to the management of common areas, are: safety, cleanliness, work of the condominium manager, neighbourhood relationships, behaviour of residents, condominium expenses, and maintenance. The evaluation of safety, between low-income users, was frequently in the survey results, both with respect to the management (security service, fences, cameras), and regarding the architectural project (layout and visibility of community areas)¹⁶. Users mentioned several times the unsafe environments related to conflicts and expulsion of residents.

Regarding to architectural project of community areas, the characteristic most valued by users was the playground. This is justified, in part, by insufficient access of users to public school, and the family profile of beneficiaries - with the frequent presence of families with children. The playground was associated (by users) mainly to two factors: (a) the importance of socialization among children, with regard to their well-being and development; (b) the need for a space for children during parents' working hours.



Figure 3 – Playground in São Leopoldo (credits: Marques, 2015)

Among the main results of the mentioned evaluations, it's observed that the social housing in the form of large condominiums is not associated by the users with positive outcomes. The aforementioned privatisation of community areas has contributed to a scenario of insecurity, conflicts between

residents and get away of beneficiaries. This could cause the loss of coordination/management over the target population (low-income families). Additionally, there is difficulty in the legal regularization of buildings made through the MCMV program for residents' families. Many of them are not beneficiaries, and did not receive social work. It can be seen in low-income housing of MCMV a great importance of Social Work Technical accomplished, and insufficient preparation of families for the management of its community areas¹⁷.

THE FOCUS GROUP

On the basis of the on-going experience with PIEC and a relevant number of post-occupancy evaluations (started in 2006), the results of the study about MCMV in São Leopoldo/RS, and the possibility of PIEC to be further developed as MCMV, a discussion of results of previous evaluations has been organized in Municipal Department of Housing, on November 20, 2015. The research technique used was a Focus Group, with three participants from PROPUR/UFRGS and seven city technicians involved in the development of PIEC's housing projects.

For the focus group technique, the research team tried to follow the guidelines proposed by Pelicioni and Lervolino¹⁸, and Ressel et al.¹⁹. The research team was composed of three people, one of the group moderator (who led the conversation) and the other two collaborators. Collaborators worked mainly on observation and recording of data (which were noted and recorded, with the permission of the participants). The discussion was organized primarily around 4 topics, which are presented below:

1. The impact of post-occupancy evaluations in development of social housing, especially to PIEC.

The technicians reported that they have been unable to use the information produced in the evaluations when engaged on developing the housing projects, including to PIEC. The results from the evaluations seem to give evidence of and confirm some characteristics and problems that had already been noticed. Some of the problems tend to be more related to multi-family building typology and to housing units e.g. dimensioning housing units in general and not specifically to PIEC.

According to the technicians, one of the possible causes for the difficulty in using this information is said to be that a condition set for these projects is that they must be economically viable. The Directorate lays great emphasis on the target of producing a large number of social housing units. The sites (land) are expensive and efforts are concentrated on making housing projects financially and legally feasible.

Insistence on this has hindered giving consideration to users' perceptions when the program's projects are being developed. The explanation for this by one of the architects is: "we are very much more than at arm's length from the population and we are very close to the market". This fact has even been reinforced in some of the evaluations, which have shown a large gap between the perceptions of what the technicians involved in developing PIEC hope for and what the residents of housing estates actually perceive (experience).

According to the technicians, research findings could be better used if there were methodologies that would interweave data on economic feasibility with the socioeconomic profile of the population and users' needs. Such data could be presented to superiors (managers) in the form of argument for including information resulting from the evaluations so as to make effective use of this information to make improvements to future projects.

There is another matter that technicians have noticed. It is possible that making links between data on economic feasibility and the findings of evaluations would result in the programme changing focus. It would shift from being on the quantitative to the qualitative production of social housing, with a view, in the long run, to achieving more satisfactory results when developing the programme.

Finally, one of the architects emphasized that research on evaluating users' perceptions (bearing in mind that the team has kept in contact with the POEs' results for several years), in addition to which

the team's experience in developing social housing helped and led to a better understanding of the complex characteristics of the population benefited.

2. The management problems of the community areas and the impacts to social housing residents, especially the PIEC population.

According to the technicians, the common areas of PIEC housing estates are configured as public areas and not like those of a gated community, which in fact sometimes is the case under MCMV. The technicians reported that closed-in community areas tend to not work properly in this type of project due to the users themselves having difficulties in managing such areas.

Moreover, the technicians that design aspects of the common areas of PIEC ventures can give users a higher level of security. The layout of these spaces, for example, may favour being able to keep an eye on and subsequently to monitor activities taking place in them, if they are located centrally.

The technicians also state that the form of open condominium PIEC estates when integrated with public spaces in the city, such as streets and squares, has led to estates having a higher level of security.

The technicians claim that while the way that PIEC is managed is being changed, the community areas of housing estates will continue to be public spaces. Once again it was emphasized that public spaces are the responsibility of the Municipal City Hall of Porto Alegre (PMPA), which oversees the management and maintenance of these areas.



Figure 4 – PIEC Public Space in PIEC (Jardim Navegantes estate) (credits: Monteiro, 2015)

3. The impact of the discontinuity of public policies and housing programmes on the production of social housing and on its users.

According to the technicians, the discontinuities of public policies tend to have a direct effect on the results hoped for from PIEC. Changes to the guidelines of Brazilian housing programmes directly affect how institutions such as city halls provide housing. After implementing MCMV, the City Hall was left with virtually no sources of funding for housing. In addition, there were timing issues among the projects that make up the PIEC, especially the housing and social projects. As a result, users were not duly monitored with regard to the educational activities they needed before they occupied the new housing area. This resulted in spaces being inadequately occupied and even to users leaving the estates.

4. The impact on users of mass production logic in large social housing estates

According to the technicians’ point of view, the logic of mass production tends to affect the users of the programme. The technicians reported that the purpose of the programme is precisely that this production should be more personalised, which to some extent may make it possible for users to feel they own it. Up until now, the program has offered three housing typologies: single-storey homes; two-storey family homes; and units for people with special needs (handicapped people).

Housing typologies of PIEC



Figure 5 – (a) housing typologies (adapted from Prefeitura Municipal de Porto Alegre, 2013), (b, c and d) Pictures of Housing typologies (credits: Monteiro, 2015).

A point raised in the discussion is the fact of the very users customizing the housing units, as can be seen in Figure 5 (b, c and d). The evaluations conducted demonstrated that these users tend to make numerous changes in their housing units as a form of appropriating the spaces, which also influences how long they remain in the housing units²⁰.

Therefore, the possibility of users' customizing their housing unit could be put at risk if the logic of mass production and verticalised multi-family buildings is implemented. Among the consequences, users' higher level of dissatisfaction and even moving out of the units due to the difficulty of adapting the units may be mentioned.

CRITICAL REFLECTIONS AND PERSPECTIVES

The reflections generated in the focus group appear to support the hypothesis that mass production, traditionally used by the MCMV, tend to potentiate the negative impacts in the development of PIEC. Among these negative impacts could be mentioned the distance of the project to the real needs of its users, as shown in post-occupancy evaluations performed on the project MCMV²¹.

In addition, the mass production disseminated by the MCMV program tends to negatively affect the guidelines of customization (also in consideration of the low-income population needs) implemented since the early design PIEC. Even if the customisation/flexibility could be improved as shown by recent projects and precedents in South America (e.g. Monterrey Housing by Elemental)²², PIEC is not properly considered a mass building programs such as MCMV, as it has enabled according to the user's needs (e.g. the choice of different housing units).

The current form of housing provision through programs such as MCMV tends to disregard the different family arrangements since the program's focus becomes the densification of housing. Therefore, it is possible that the problems already identified in the housing units program, such as dissatisfaction with the physical space of the housing unit and the lack of environmental comfort²³, would become more evident when the housing is mass produced (quantitatively). Meaningful social housing case studies could be implemented so that to balance housing density with housing typologies²⁴ ("Low rise, high density"²⁵), so that to safeguard cultural, social and environmental conditions. In addition to the impacts on the housing project, the changes in Brazilian social housing policies also tend to enhance negative impacts on community areas of the estates. Among the main negative impact on community areas PIEC is the gated communities' typology that result in fragmented and unsafe urban space. Again, starting from the legacy of the Modern Movement experience, housing typologies could be mixed or variously composed in order to facilitate visual connections and community safeguard (e.g. Figini-Pollini project for Harar district in Milan, Italy)²⁶.

Another aspect for discussion is the difficulty of community areas' self-management by the residents. If gated the community areas would become under the responsibility of the residents: this would tend to enhance the internal conflicts and the inappropriate use of spaces. The new configuration of community areas delivered by the MCMV program seems to negatively affect the PIEC specifically with regard to the management and quality of such spaces.

On the basis of the evidence provided it may be deduced that the discontinuities of Brazilian housing policies tend to directly affect the benefits generated by the previous programs. Moreover, negative outcomes and impacts that have been identified in PIEC could be amplified by the adoption of such policies. Thus, the use of systematic evaluations (e.g. also through specific set of indicators²⁷) of housing projects carried out by different housing programs can help in monitoring and managing such interventions, so that to reduce some of the issues for the further development of such programmes.

REFERENCES

- ¹ Prefeitura Municipal de Porto Alegre (PMPA). *Programa Integrado Entrada da Cidade. Caderno 1 Marco de Referência e descrição do Programa. Fundo Financeiro para o Desenvolvimento da Bacia do Prata*. (Porto Alegre: Prefeitura Municipal de Porto Alegre, 2002).
- ² Patricia Tillmann, Maria Scussel, Carlos Formoso and Luciana Miron, *Desafios para a gestão de projetos urbanos com elevada complexidade: análise do Programa Integrado Entrada da Cidade em Porto Alegre, RS. Ambiente Construído* (2011). v.11, 2011.
- ³ Luciana Miron, *Gerenciamento dos Requisitos dos Clientes de Empreendimentos Habitacionais de Interesse Social: Proposta para o Programa Integrado Entrada da Cidade em Porto Alegre/RS* (PhD thesis, Universidade Federal do Rio Grande do Sul, 2008).
- ⁴ Cecilia Rocha, Luciana Miron, Maria Scussel and Carlos Formoso, *A Conceptual Framework for Assessing Integrated Low-Income Housing Projects*. (paper presented at the International Symposium on Construction in Developing Countries, Malaysia: Universiti Sains Malaysia, 2009).
- ⁵ Carlos Formoso and Luciana Miron, *Contribuições para a avaliação de programas integrados de habitação de interesse social: Relatório de Avaliação Intermediária do PIEC*. (Interim Evaluation Report PIEC. Porto Alegre: NORIE/UFRGS, 2008).
- ⁶ Ibid.
- ⁷ Deyvid Monteiro and Luciana Miron. *Qualidade de vida em empreendimentos habitacionais de interesse social: uma abordagem através da percepção dos usuários*. (paper presented at XVI Encontro Nacional da Associação Nacional de Pós-Graduação e Pesquisa em Planejamento Urbano e Regional, Belo Horizonte, 2015).
- ⁸ Deyvid Monteiro, *Proposta de um método para avaliação da percepção de valor em empreendimentos habitacionais de interesse social* (PhD diss., Universidade Federal do Rio Grande do Sul, 2015).
- ⁹ Deyvid Monteiro and Luciana Miron, *Qualidade de vida em empreendimentos habitacionais de interesse social: uma abordagem através da percepção dos usuários*. (paper presented at XVI Encontro Nacional da Associação Nacional de Pós-Graduação e Pesquisa em Planejamento Urbano e Regional, Belo Horizonte, 2015).
- ¹⁰ Deyvid Monteiro, *Proposta de um método para avaliação da percepção de valor em empreendimentos habitacionais de interesse social* (PhD diss., Universidade Federal do Rio Grande do Sul, 2015).
- ¹¹ Sergio G. Baierle, *Urban Struggles in Porto Alegre: Between Political Revolution and Transformism* (Porto Alegre: Cidade – Centro de Assessoria e Estudos Urbanos, 2007).
- ¹² Luciana Miron, *Gerenciamento dos Requisitos dos Clientes de Empreendimentos Habitacionais*
- ¹³ Lúcia Melchior and César Wagner, *Considerações sobre a distribuição espacial e territorial do Programa Minha Casa Minha Vida na Região Metropolitana de Porto Alegre* (paper presented at the III Congresso Internacional de Sustentabilidade e Habitação de Interesse Social – CHIS, Porto Alegre, Rio Grande do Sul, April 28-30, 2014).
- ¹⁴ Jones Pinto and Nirce Medvedovski, *Avaliação do usuário de uma Habitação de Interesse Social do PMCMV quanto ao fornecimento de equipamentos e serviços urbanos acessíveis e de qualidade para o seu uso: estudo de caso do Res. Jardins do Obelisco em Pelotas-RS* (paper presented at the III Congresso Internacional de Sustentabilidade e Habitação de Interesse Social – CHIS, Porto Alegre, Rio Grande do Sul, April 28-30, 2014).
- ¹⁵ Laura Marques, *Minha Casa Minha Vida: análise da percepção de valor sobre as áreas comuns* (PhD diss., Universidade Federal do Rio Grande do Sul, 2015).
- ¹⁶ Ibid.
- ¹⁷ Ibid.
- ¹⁸ Maria Cecília Pelicioni and Solange Lervolino, *A utilização do grupo focal como metodologia qualitativa na promoção da saúde*, Revista da Escola de Enfermagem da USP 35 (2001): 115-121
- ¹⁹ Lúcia Ressel, Carmem Beck, Dulce Gualda, Izabel Hoffmann, Rosângela Silva and Graciela Sehnem, *O uso do grupo focal em pesquisa qualitativa*, Texto and Contexto Enfermagem 17.4 (2008): 779.
- ²⁰ Miron, *Gerenciamento dos Requisitos dos Clientes de Empreendimentos Habitacionais*
- ²¹ Sheila Ornstein and Antero Cruz, *Análise de desempenho funcional de habitações de interesse social na grande São Paulo* (paper presented at the annual meeting for the Encontro Nacional de Tecnologia do Ambiente Construído, Salvador, Bahia, April 24-28, 2000).
- ²² Elemental, “Monterrey Las Anacuas Housing”, *Area* 143 (2015):104.
- ²³ Deyvid Monteiro, *Proposta de um método para avaliação da percepção de valor em empreendimentos habitacionais de interesse social* (PhD diss., Universidade Federal do Rio Grande do Sul, 2015).

²⁴ Javier Mozas and Aurora Fernández Per, *Density Condensed edition. New collective housing* (Vitoria-Gasteiz: a+t architecture, 2006).

²⁵ Greta Hansen, "Low Rise High Density", *Domus* (on line), June 29, 2013

http://www.domusweb.it/en/architecture/2013/06/3/low_rise_high_density.html

²⁶ Sara Protasoni, "Casa "A" ad alloggi duplex e insulae nel quartiere di via Dessiè a Milano, 1951-55", in Vittorio Gregotti, Giovanni Marzari (edited by), *Luigi Figini Gino Pollini. Opera completa*, (Milano: Electa, 1996), 369.

²⁷ Simon Joss and others, *Tomorrow's City Today. Prospects for standardizing sustainable urban development*. London: University of Westminster, 2015.

BIBLIOGRAPHY

Cardoso, Aragão and Araujo, "Habitação de interesse social: política ou mercado" (paper presented at the XIV Encontro Nacional da Anpur, Rio de Janeiro, Rio de Janeiro, May 23-27, 2011).

Formoso and Miron. "Contribuições para a avaliação de programas integrados de habitação de interesse social: Relatório de Avaliação Intermediária do PIEC". (Interim Evaluation Report PIEC. Porto Alegre: NORIE/UFRGS, 2008).

Krause, Balbim and Lima, "Minha Casa Minha Vida, nosso crescimento: Onde fica política habitacional?" Instituto de Pesquisa Econômica Aplicada-IPEA 1853 (2013).

Logsdon, "O Programa Minha Casa, Minha Vida em Cuiabá-MT: uma análise da qualidade dos projetos destinados às famílias de baixa renda" (PhD diss., Universidade Federal de Santa Catarina, 2012).

Marques, "Minha Casa Minha Vida: análise da percepção de valor sobre as áreas comuns" (PhD diss., Universidade Federal do Rio Grande do Sul, 2015).

Medvedovski, "Gestão de espaços coletivos em HIS – a negação das necessidades básicas dos usuários e a qualidade do cotidiano e do habitat" (paper presented at the Simpósio Brasileiro de Qualidade do Projeto no Ambiente Construído, São Carlos, São Paulo, November 18-20, 2009).

Melchior and Wagner, "Considerações sobre a distribuição espacial e territorial do Programa Minha Casa Minha Vida na Região Metropolitana de Porto Alegre" (paper presented at the III Congresso Internacional de Sustentabilidade e Habitação de Interesse Social – CHIS, Porto Alegre, Rio Grande do Sul, April 28-30, 2014).

Miron, "Gerenciamento dos Requisitos dos Clientes de Empreendimentos Habitacionais de Interesse Social: Proposta para o Programa Integrado Entrada da Cidade em Porto Alegre/RS" (PhD thesis, Universidade Federal do Rio Grande do Sul, 2008).

Monteiro, "Proposta de um método para avaliação da percepção de valor em empreendimentos habitacionais de interesse social" (PhD diss., Universidade Federal do Rio Grande do Sul, 2015).

Monteiro and Miron. "Qualidade de vida em empreendimentos habitacionais de interesse social: uma abordagem através da percepção dos usuários". (paper presented at XVI Encontro Nacional da Associação Nacional de Pós-Graduação e Pesquisa em Planejamento Urbano e Regional, Belo Horizonte, 2015).

Monteiro, Miron, Shigaki and Echeveste. "Avaliação da percepção de valor em Empreendimentos Habitacionais de Interesse Social: Perspectiva de técnicos e de usuários". (Magazine Ambiente Construído - Online). (2015).

Ornstein and Cruz, "Análise de desempenho funcional de habitações de interesse social na grande São Paulo" (paper presented at the annual meeting for the Encontro Nacional de Tecnologia do Ambiente Construído, Salvador, Bahia, April 24-28, 2000).

Pelicioni and Lervolino, "A utilização do grupo focal como metodologia qualitativa na promoção da saúde", *Revista da Escola de Enfermagem da USP* 35 (2001): 115-121.

Prefeitura Municipal de Porto Alegre. "Programa Integrado Entrada da Cidade". (Notebook 1 Marco Reference and description of the program. Financial Fund for the Development of the Bacia do Prata, Porto Alegre: Prefeitura Municipal de Porto Alegre, 2002).

Prefeitura Municipal de Porto Alegre. "Programa Integrado Entrada da Cidade". (Annual monitoring report on physical and financial execution, 2013).

Ressel et al., "O uso do grupo focal em pesquisa qualitativa", *Texto and Contexto Enfermagem* 17.4 (2008): 779.

Rocha, Miron, Scussel and Formoso. "A Conceptual Framework for Assessing Integrated Low-Income Housing Projects". (paper presented at the International Symposium on Construction in Developing Countries, Malaysia: Universiti Sains Malaysia, 2009).

Tillmann, Scussel, Formoso and Miron. "Desafios para a gestão de projetos urbanos com elevada complexidade: análise do Programa Integrado Entrada da Cidade em Porto Alegre, RS". *Magazine Ambiente Construído - Online*. (2011).