Dossier temático: Comportamiento humano informativo

Research and teaching in the 30 years in Uruguay 1993-2023
Investigación y enseñanza en 30 años en Uruguay 1993-2023
Pesquisa e ensino nos 30 anos no Uruguai 1993-2023

Martha Sabelli[1] ORCID 0000-0002-4130-0312
[1]Professor and Senior Researcher. Instituto de Información, Facultad de Información y Comunicación (FIC), Universidad de la República. San Salvador 1944, Montevideo. Uruguay. Correo electrónico: martha.sabelli@fic.edu.uy

Abstract

Since the beginning of the '90s, a line of research developed in the academic field by interdisciplinary teams in User Studies, and called from the 2000s, Information Behavior, began in Uruguay from the Information Science. The research is anchored in a contemporary vision of Information Science, inserted in the social sciences, attentive to the problems of individuals as people and of social groups that experience the phenomenon of information in complex societies such as human beings humans. Hence the growing and enriching interdisciplinarity of theoretical and methodological references and the integration of research teams. Two stages are identified, in the first (1993-2002) it is located in the EUBCA, Udelar and CIESU. The second is a line of research focused on the informative behavior of communities in disadvantaged contexts (2008-2023) in interdisciplinary teams from EUBCA (2008-2010), FIC (2013-2023), Udelar and its antecedent in the Prodic Program, Udelar (2010-2012). The projects are presented: 1) chronologically by title, funding body, person in charge and research team, accompanied by citations of the publications they generated; 2) objectives; 3) typologies of communities, objectives, territorial scope; 4) methods; 5) results; and 6) final thoughts. Annexes and references are included at each stage.

Keywords: User Studies**;** Information behavior; Information Behavior research; Uruguay; Research projects

Resumen

Desde principios de los '90 se inició en Uruguay desde la Ciencia de la Inforrmación una línea de investigación desarrollada en el campo académico por equipos interdisciplinarios en Estudios de Usuarios, y denominados a partir de los 2000, Comportamiento Informativo. La investigación se ancla en una visión contemporánea de las Ciencia de la Información, inserta en las ciencias sociales, atenta a los problemas de los individuos como personas y de los grupos sociales que viven el fenómeno de la información en sociedades complejas como lo son los seres humanos. De ahí la creciente y enriquecedora interdisciplinariedad de los referentes teóricos y metodológicos y la integración de los equipos de investigación.

Se identifican dos etapas, en la primera (1993-2002) se ubica en la EUBCA, Udelar y CIESU. La segunda es una línea de investigación centrada en el comportamiento informativo de comunidades en contextos desfavorecidos (2008-2023) en equipos interdisciplinarios desde la EUBCA (2008-2010), FIC (2013-2023), Udelar y su antecedente en el Programa Prodic, Udelar (2010-2012).

Los proyectos son presentados: 1) cronológicamente por título, organismo financiador, responsable y equipo de investigación, acompañados de citas de las publicaciones que generaron; 2) objetivos; 3) tipologías de las comunidades, objetivos, alcance territorial; 4) métodos; 5) resultados; y 6) reflexiones finales. En cada etapa se incluyen Anexos y las referencias.

Palabras clave: Estudios de Usuarios, Comportamiento Informativo; Investigación en Comportamiento Informativo; Uruguay; Proyectos de investigación

Resumo

Desde o início dos anos 90, uma linha de pesquisa desenvolvida no campo acadêmico por equipes interdisciplinares em Estudos do Usuário, e denominada a partir dos anos 2000, Comportamento Informacional, começou no Uruguai a partir da Ciência da Informação. A pesquisa está ancorada em uma visão contemporânea da Ciência da Informação, inserida nas ciências sociais, atenta aos problemas dos indivíduos como pessoas e dos grupos sociais que vivenciam o fenômeno da informação em sociedades complexas como a dos seres humanos. Daí a crescente

e enriquecedora interdisciplinaridade dos referenciais teóricos e metodológicos e a integração das equipas de investigação. Duas etapas são identificadas, na primeira (1993-2002) está localizada na EUBCA, Udelar e CIESU. A segunda é uma linha de pesquisa focada no comportamento informativo de comunidades em contextos desfavorecidos (2008-2023) em equipes interdisciplinares da EUBCA (2008-2010), FIC (2013-2023), Udelar e sua antecedente no Programa Prodic (2010 - 2012). Os projetos são apresentados: 1) cronologicamente por título, órgão financiador, responsável e equipe de pesquisa, acompanhados de citações das publicações que geraram; 2) objetivos; 3) tipologias de comunidades, objetivos, abrangência territorial; 4) métodos; 5) resultados; e 6) considerações finais. Anexos e referências são incluídos em cada etapa.

Palavras-chave: Estudos do Usuário, Comportamento Informacional; Pesquisa Comporrtamento Informacional; Uruguay; projetos de pesquisa

1. Introduction

Since the early '90s, a line of research developed in the academic field by interdisciplinary teams from the so-called in those years*User Study*, and in the 2000s, *Information Behavior and Practices* (IBP) of *Information Science* (IS) began in a small country in the South: Uruguay, very close to the socio-cultural reality of the communities investigated.

The research is anchored in a contemporary vision of Information Science, attentive to the problems of individuals as persons and of social groups living the phenomenon of information in complex societies as, undoubtedly, human beings are. Hence, the growing and enriching interdisciplinarity of theoretical and methodological references and the constitution of research teams.

The changes and dynamics of the different aspects and stages of information and communication flows in a socio-economic, cultural, and historical environment impacted by the information society and ICT, and currently, the digital revolution

centered on Artificial Intelligence, entail the existence of communities of citizens who must face new and more profound "information gaps." These, in general, are not addressed as they deserve by public policies of information for citizens in Latin America, mainly focused on overcoming digital gaps.

This line of research understands user studies, nowadays called by international academia "information behavior studies", as a path to follow to interpret better our different types of user communities in their behaviors and information practices.

The line of research presented here has had the possibility of developing for an extended period in Uruguay in a continuous and integrated way to teaching and university extension.

Its growth is remarkable in several aspects. One of them is the recognition by the academic community by incorporating the researchers, and therefore the discipline, in the area of social sciences of the National System of Researchers in Uruguay, as happens in other countries of the region. Another aspect to consider is the interdisciplinary nature of the theoretical and methodological perspectives or paradigms, which promote greater integration of teams from diverse research experiences and academic backgrounds.

Likewise, the projects have allowed sharing the experience at a national level and with researchers abroad in events such as ISIC (*Information Seeking in Context*, known as *The Information Behavior Conference*). Also, being able to participate in a group of researchers from Mexico, Spain, and Brazil in the *Seminar of Information Users,* coordinated by Dr. Juan José Calva González from the Library Science and Information Research Institute - IIBI, Universidad Autónoma de México (UNAM). Moreover, finally, participating in the research group of the *Estudos em Práticas Informacionais e Cultura* (EPIC), coordinated by Dr. Carlos Ávila Araujo from Escola de Ciência da Informação -ECI of the Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, Brazil.

The research projects to be presented were selected in calls from the Sectorial Commission for Scientific Research (CSIC), University of Republic (in the

future,UdelaR),Uruguay (4) implemented in the former School of Library Science and Related Areas (EUBCA), current Information Institute, at the School of Information and Communication (FIC) of UdelaR, created in December 2013; from the Program for Academic Development of Information and Communication (PRODIC)of UdelaR(1), the *Fund Prof. Clemente Estable* of the Ministry of Education and Culture (1), and the International Development Research Center (IDRC) of Canada (1), presented and developed at the Center for Information and Studies of Uruguay (CIESU).

We can identify two stages, separated by our Ph.D. (2001-2004). In the first stage, we worked in teaching and research with Associate Professor Bachelor in Librarianship María Cristina Pérez, who retired in 2015. The second stage is identified by a line of research focused on the information behavior of communities in disadvantaged contexts (2008-2023) in interdisciplinary teams that we had the opportunity to coordinate.

First, we listed them chronologically by title, funding agency, responsible, and research team, accompanied by citations of the publications they generated.Then, we will present the research subjects located in contexts, the objectives and territorial scope, the methodologies used, the main results obtained, and the final reflections. The presentation is supported by tables in the Annex. References are included at the end of Part 1 and Part 2.

2. Research   projects of the First stage 1993-2002

2.1 Projects

- **Project***Users of the IDIN Network (International Development Information Network)in Social Sciences,* in the future, referred to in the text as *IDIN Project*. Selected and supported by the Information Sciences Division of the International Development Research Center - IDRC, IDRC Project 91-0278 (1992), coordinated by CLACSO (Latin American Commission of Social Sciences) 1992-1993, developed in the Department of Research in Information and Documentation of CIESU. Responsible: Martha Sabelli, associate researcher Cristina Pérez Giffoni, and methodology advisor Constanza Moreira.

Publications: Pérez Giffoni, M.C. & Sabelli, M. (1995), Sabelli, M. & M. C. Pérez Giffoni (2010a), IDRC Project 91-0278. (1992).

-**Project***Study on needs, use, and production of information of workers in the metallurgical sector and related branches (UNTMRA)*, in the future,*UNTMRA Project*, selected and financially supported by CSIC, 1994-1996, EUBCA.Responsible: Cristina Pérez Giffoni and Martha Sabelli; advisors in the topic Ana Pioli and in the methodology José Enrique Fernández.

Publications: Pérez Giffoni, M. C. and Sabelli, M. (1999), Pérez Giffoni, M.C. and Sabelli, M. (2010b).

-**Project** *Strengthening the methodology of distance education applied to the development of dairy systems* (in the future, referred to in the text as *Dairy Farmers Project*), jointly with the School of Veterinary Medicine, UdelaR, selected and funded by CSIC, 1996-1999, EUBCA.Responsible: Martha Sabelli and María Cristina Pérez Giffoni, assistant researcher Paulina SzafranMaiche.

Publications: Sabelli, M. and Pérez, M. (2001), Sabelli, M. and M. C. Pérez Giffoni (2010b).

-**Project** *Informed to decide: the needs and use of information in the environment of science and technology development*, in the future, referred to in the text as *S & T Decision-Makers Project*.It was selected and financially supported by the *Fund Prof. Clemente Estable*, 1997-1998, Department of Research in Information and Documentation of CIESU. Responsible: Martha Sabelli, associate researcher María Cristina Pérez Giffoni, methodology advisor José Enrique Fernández, S y T advisor Gisela Argenti, assistant researcher Paulina SzafranMaiche.

Publications: Sabelli, M., Fernández, J.E.; Pérez Giffoni, M. C. (2010); Sabelli, M.; Fernandez, J.E. & Pérez Giffoni, M.C. (1999).

-**Project** *Use of electronic information by academics at the University of the Republic: effects and perspectives*, in the future, referred to in the text as *UdelaR Academics Project*.It was selected and funded by CSIC (R+D projects), 2000-2002, EUBCA.Responsible María Cristina Pérez and Martha Sabelli, methodology advisor José Enrique Fernández, collaborators Paulina SzafranMaiche and Julio Castro.

Publications: Pérez Giffoni, M. C. and Sabelli, M. (2004), Pérez Giffoni, M.C. and Sabelli, M. (2010c).

2.2 Research objectives

The aims and objectives of the projects comprise a double dimension: the one inherent to the theoretical and methodological perspectives presented in each one on the field of information behavior and the one inherent to each situation-problem identified in a specific user community. The latter guides the scope of the research questions and the unit of analysis,as it is where the barriers, conflicts, and facilitators of the phenomenon of information transfer and flow emerge and, in short, in the contexts of individuals as subjects under investigation in their family, social, and work environment, in their daily life and their role as citizens.

2.3 Theoretical and methodological references

Summarizing the theoretical references supporting the research in this short work is a difficult challenge to overcome. We have opted for a brief mention of the main perspectives or metatheories and their leading theoreticians, referring to the publications of our authorship and co-authorship cited in the bibliography.

In the period 1992-1993, the researches adhered from the beginning to the user-centered approaches, called "alternative paradigms" by B. Dervin and M. Nilan, and specifically in the contributions of *Sense-Making* in an early form in Ibero-America (there is no literature that mentions it until that date)and its constructivist approaches and the *models of Tom Wilson*, the "master" of this disciplinary field, with his contributions to the different phases and dimensions of the phenomenon of information needs and behavior and his models of 1981 and 1996, especially INISS Project.

Undoubtedly, B. Hjøland's Domain Anlytic Approach and other perspectives of socio-cognitive approaches from the mid-1990s onwards have contributed ideas and methods (Hjørland, B. &Albrechtsen, H. 1995).

Each project is described in the book in 2010 (Pérez, M.C and Sabelli. M., 2010a) and includes textual references of each one, where the citation of *Sense-Making* in 1993: Dervin& Nilan (1986) and the investigations of Michael Nilan and colleagues (Nilan et al. 1987, 1988, 1989, 1991) as well as Tom Wilson and colleagues on the INISS project: Roberts, N. & Wilson, T.D. (1988) and with D.R. Streatfield (1977,1979, 1981) and Line, M.(1971,1980) on INFROSS project. Also, the influence of Nicholas Belkin (Belkin, N. 1982; Belkin, N., Oddy, R.N. & Brooks, H.M. 1982a,b) with his ASK (Anomalous State of Knowledge) model. The book is digitized, and we have made it available on ResearchGate.

Part of the texts included are extracts of conferences in the Seminars of Information Users coordinated by Dr. Juan José Calva González, published in books that can be consulted (Sabelli, M. 2021).

2.4 Typology of user communities, objectives, and territorial scope

The typology of the communities investigated can be summarized as follows:

2.4.1 Academic and scientific scope: researchers and advisors in Social Sciences.

The *IDIN Project* was developed at the global level and the *UdelaR Academics Project* at the national level.

The *IDIN Project* was aimed at the international community of users of the IDIN Network made up of social science researchers in five regions in the world: Asia and the Pacific, Africa, Latin America, Europe, and Arab countries, and collaborated in the proposal of information products and services with added value to be considered by IDIN. In this sense, the objectives were: to diagnose the information needs, characterize the information use and search behavior and identify the information services and products required by the users.

The *Udelar Academics Project* covered the community of UdelaR researchers-teachers, considering the quality of researcher-teacher at the schools and other services (colleges and institutes). It was proposed to study, from the perspective of the user/generator of information, to what extent technological advances affect their behavior, the level of acceptance of new modalities, the use of information, and the communication channels of university researchers in the context of electronic information. It is approached in its double quality of producer and consumer of information and the research function as a fundamental part of academic work and inherent to the teaching task.

2.4.2 Sphere of policy and management decision-makers

The *S&T Decision-Makers Project* addressed a national universe made up of farmers, intermediaries, and users of scientific and technological information belonging to the Ministry of Education and Culture (MEC), the National Council for Scientific and Technical Research (CONICYT), the Planning and Budget Office (OPP), UdelaR, the Inter-American Institute for Cooperation on Agriculture (IICA), the Quality Committee, and the Chamber of Industry of

Uruguay; in other words, the decision-makers in the area of S&T most involved in the creation and use of indicators. The study of information users focuses on the needs and behaviors of S&T decision-makers and direct advisors in the area, the eventual beneficiaries of statistical data and indicators. It explores the vision of the actors involved in producing and using this information, their relationships, and possible gaps, holes, deviations, and interruptions in the information circuit. On this basis, an attempt is made to reformulate and eventually create information services and products with intellectual and ideological added value, promoting the rapprochement between farmers, mediators, decision-makers, managers, and advisors.

2.4.3 Worker contexts

The *UNTMRA Project* studied unionized metalworkers in the Uruguayan capital, Montevideo. Among its objectives, it sought to contribute to a union information policy, through knowledge of workers in the metallurgical sector, both as demanders and providers of specialized information and, specifically, to identify the needs, interests, and habits of workers concerning information related to the socio-labor, technological, and union fields. Likewise, to systematically know the different aspects that intervene in the motivation for the use of information and to determine the obstacles and degrees of satisfaction in its access.

The *Dairy Farmers Project* focused its research on rural workers in dairy farms and their families. It sought to help solveparticular problems of dairy farmers and their family in unfavorable contexts through access to and use of information. Among the proposed objectives, it was highlighted the promotion of the use of information to contribute to the incorporation and application of knowledge and new behaviors to the production process of this dairy system. This implied having previous knowledge of their attitudes and aptitudes regarding their knowledge, needs, and relationship with information, what information they required to contribute to improving their quality of li   fe, and how they should receive it.

2.5 Methods

The methods and techniques selected are closely related to the theoretical perspective that guides the research approach and, at the same time, to the experience from the inside of the emerging problem and the questions it raises. The design process of the projects has an immanent anchorage in the previous stages, that is, the close contact and empathy with the research subjects and those who can support us in the process of essential interaction in the construction of the research.

- In-depth interviews

They allowed us to obtain information on aspects such as opinions, perceptions, attitudes, and feelings that are often not observable. The grounded theory of Glaser and Strauss, from the 1960s, stands out.

Examples: *S&T Decision-Makers Project* (1997-1998): in-depth interviews with qualified informants in the decision process;*UNTMRA Project* (1994-1996): in-depth interviews with union leaders as qualified informants.

-Surveys with open-ended and closed-ended questions with critical incident technique**.**

The presence of the critical incident technique derives from the influence of Brenda Dervin's Sense-Making methodological theory, the micro-moment time-line interview method, describing problematic situations and the search for information. It was applied in our research in a limited way to ask interviewees to recall a problem situation of research search, and the steps followed (gaps, helps, etc.) that are identified by the interviewee and especially, how he/she constructed the sense, i.e., from his/her perception of the episode.

Examples: Self-administered survey: *IDIN Project* (1992-1993), applied in the five regions. It was supported by the regional nodes of the IDIN Network, in charge of distributing and receiving it. A total of 145 responses were collected: Latin America: 58, Asia and the Pacific: 5, Europe: 26, Africa: 22, and Arab

countries: 34. In Uruguay and Argentina, the survey was administered through a personal interview.

The survey form included: *1. respondent data; 2. information uses and needs; 3. use and needs of information in an experience; and 4. proposals for change*. The data collected were coded and tabulated in DBase for further automatic processing with the SPSS utility package. It should be noted that the third part on *Information use and needs in a personal experience* posed critical incident technique through the sequential description, by the respondent, of a problematic situation in the search for information, which occurred in the last six months.

Face-to-face survey: *UNTMRA Project* (1994-1996). The data collection method consisted of a survey of 79 workers by interview, enriched by in-depth interviews with union leaders as qualified informants. The survey was structured in the following areas: 1. identification data (personal, demographic, work context, and training); 2. general opinions on information; 3. union and work information: need, access, means; 4. technical information: need, access, means; 5. business information: need, access, means; 6. use of information; 7. own production and flow of information; 8. use of technology; and 9. barriers to access. The data collected were coded and tabulated for automatic processing with the SPSS statistical package.

Face-to-face survey-interview: *UdelaR Academics Project* (2000-2002). A survey was applied personally by members of the research team and Librarianship students to a purposive sample of 151 teachers from the 18 services of UdelaR (13 schools, 2 colleges, 2 institutes, and 1 bachelor's degree).The unit of analysis was the individual as a teacher-researcher. The survey form included 62 open and closed questions, covering data on the interviewee, type of electronic communication used and frequency of use, access to services, training received, own publications in electronic media, and a critical incident. Excel spreadsheets were used for automatic data processing. In-depth interviews and bibliographic and documentary analyses were also carried out.

-Focus groups

Being a collective interview technique that allows the observation of the interaction between the actors, showing the levels of consensus within relatively homogeneous groups, it is used by some projects.

Example: 3 focus groups: *S&T Decision-Makers Project* (1997-1998). First, 14 interviews were conducted with qualified informants from UdelaR, CONICYT, Ministry of Industry, National Quality Committee, OPP, Institute of Statistics (INE), and INIA. Guidelines for in-depth interviews were designed and applied to 12 decision makers from UdelaR, OPP, MEC, CONICYT, National Quality Committee, INIA, and the Chamber of Industries in order to approach the description of problematic situations that trigger the search for and use of information and the context in which this process took place. Based on the results of the qualitative analysis of the interviews, three focus groups were implemented: intermediaries from information units (libraries and documentation centers) in S&T, and second and third were made up with generators of statistical information and indicators of S&T, and decision-makers in the area, from UdelaR(second) and MEC, CONICYT, INIA and Clemente EstableBiological Research Institute (third).

- Methodological approach to the Dairy Farmers Project

This approach deserves a separate section due to its specificity.

The interview forms and guidelines were designed after a fluid dialogue in several meetings with the School of Veterinary Medicine team, who knew the community and, therefore, conveyed their vision of the dairy farmers and their socio-cultural context. The variables defined about the farmers are linked to demographic aspects, training, occupational, sociological (interaction with local institutions and groups), environment, motivations, and links with formal and informal information systems.

Data was collected through visits to the production units and observing the producers and their families in their work and living environment.Knowledge was obtained about the image dairy farmers had of information, their relationship with it, their needs, behaviors and satisfaction of needs, use of formal and informal sources and channels, problems and obstacles encountered, and possible ways to improve the situation. Most of the interviews were group interviews. At the same time, qualified informants linked to institutions that were seen as agents of support for the dissemination and transfer of information, promoting community participation, were interviewed.

2.6 Some results to consider from the first stage

The line of research began in an integrated manner with the teaching of User Studies at the former EUBCA with Cristina Pérez Giffoni, a colleague who was co-responsible for this fundamental period of User Studies. In 1992, by an unforeseen, fortuitous, and fortunate event (serendipity maybe), we were invited to carry out a User Study of the IDIN Network by the director of the Information Sciences Program of the IDRC, Fay Durrant Ph.D., when she interviewed us at the end of the SINUR Project - Urbanization Information Service (1987-2001) developed at CIESU, supported by this Program. And with great audacity, in a few minutes, we decided to accept the most ambitious project of the 30 years, being international and covering five regions of the world. Dr. Durrant's orientation to the methodological theories of Sense Making, not known and disseminated in Ibero-America, through the courses and research of Brenda Dervin -her professor at Syracuse University- and Michael Nilan, was an essential starting point for our self-training, shared with Cristina Pérez Giffoni, whom we invited to participate. Thus, Sense-Making was integrated with Tom Wilson's theories and models that dominated our perspectives since the 1970s, especially the INISS Project, with antecedents from the INFROSS Project Information Requeriments of Social Scientific and University of Sheffield projects that influenced the IDIN Project. The learning in the successful design and its execution, and especially the reading of articles thanks to the excellent newspaper library of the EUBCA and IDRC Library (Ottawa, Canada),which facilitated the consultation of several journals where those responsible for this research disseminated them in the 70s and 80s, was relevant for the continuation of the studies.

This project had a significant impact ten years later from the EUBCA in the formulation, selection by CSIC, UdelaR, and execution of the *UdelaRAcademics Project*, where much of its theoretical framework and methodology was reproduced by focusing on a community of social science researchers.

Actionresearch characterized the other projects of the period, the so-called UNTMRA of unionized metalworkers and that of milk producers (dairy farmers) in unfavorable contexts.

The self-reflective spiral in its different stages (planning, action, observation, and reflection), which characterizes this type of research, dialectically interrelates the theoretical and the practical, the individual and society. In this spiral, there are moments of problematization, diagnoses, proposals for change, implementation of the proposal, and evaluation in a participatory manner, giving rise to new problematizations. One of the most important results for the following stage was the continuous reflection on the reality approached to learn about it and transform it into a participatory process of the community involved. Since those years, we have considered that research should be at the service of the community and seek to solve its problems and needs, allowing a critical analysis of the process and an appropriation of its different phases and results by those involved.

Likewise, the spiral of actionresearch entails linking with other disciplines and their academic actors and incorporating them creatively and critically in the dynamics of understanding interdisciplinary phenomena. Inherent to this approach is the creation of circumstances and mechanisms that promote attitudes, habits, and forms of interdisciplinary work, fostering the integration of knowledge and experiences. In short, it motivated interdisciplinarity and the formation of interdisciplinary teams that characterized the second stage.

In short, this investigative approach to the flow of information and knowledge in society favors a participatory positioning with the community in the research process and a closer and more flexible relationship with academia and professionals in the topics under study.

The dairy farmers project contributed to the incorporation of participatory work with social and institutional actors: the rural school and the dairy farmers' cooperative. Also, the coexistence and exchange with women of the dairy farms, with their needs, desires, concerns, and eagerness to improve, impacted a gender perspective that emerged from the shared reality and influenced the second stage.

Another aspect was the decision of the research team, not foreseen in the design of the project and its resources, to add to the newsletters ("*Tambo Informativo*") included in the initial formulation, the creation of two libraries ("*Bibliotambo*"):

one in a rural school and the other in a cooperative of dairy farmers, to promote reading among young people and adults, and especially for rural women living in unfavorable socio-cultural contexts. In the second stage, we have foreseen informative products to be created and evaluate their access and use.

The interdisciplinary research and extension work developed in the project and the exchange built with the community showed us the possibilities and potential of the theoretical-methodological approach shared and applied with the extension area of the School of Veterinary Medicine, as they will be with other schools in the second stage.

Undoubtedly, they are a rich antecedent of an integrative vision that we expressed at the International Conference on conceptions of Library and Information Science - CoLIS 7, London, 2010 (Sabelli, 2010) and in Informatio (Sabelli, 2008b), and, especially, in our doctoral thesis (Sabelli, 2008a).

Finally, we also had the experience of researching non-users in the *S&T Decision-Makers Project*, since the research showed the non-existence of indicators in S & T.

2.7 Final reflections

The research of this period gave rise to reflections interwoven with the theoretical frameworks, a fabric formed between empirical research and theories. The interrelationship is rewarding and motivates new research. These are difficult paths in small countries with scarce resources such as Uruguay, but the interpretative and social approaches of a university committed to inclusive, integral, and democratic principles make it possible to move forward.

3. Research projects of the second stage 2008-2023

Introduction

From 2008 to the present, the focus was on disadvantaged communities in the context of vulnerability. The research subjects were young women (2008-2010), adolescents (2010-2015), older women (2017-2019), and family members of children with Autism Spectrum Syndrome (ASD) (2021-2023). We seek to understand the social realities of information and information technologies insofar as most investigations incorporate the development and use of ICTs in the quest to disseminate inclusive information

In the period 2008-2015, we focused on young women and adolescents. The primary motivation from the perspective of information behavior research is the absence and limitations of access to inclusive information. Information services to the community that are easily accessible and adequate to the needs of young people and adolescents in unfavorable contexts remain a historical debt regarding public information policies in several Latin American countries. Information is essential to achieve social rights in their many diverse manifestations; at the workplace, within the community and family, or at an individual level. The disinformation of adolescents and young people appears as an obstacle to their development and social integration. Consequently, it is essential to study their information behavior, taking their concerns, expectations, and problems into account from a participatory and *horizontal* point of view, emphasizing local knowledge and facilitating the integration of qualified information.

The urban fabric is divided into micro-worlds, different places where communities live in social, economic, and cultural contexts that compose the everyday background and the way each region is inhabited. The concept, transfer, use, and assimilation of information will present singular characteristics according to

different urban communities. The most vulnerable sectors, where vulnerability is associated with poverty and lack of skills and abilities that facilitate the development of human and social capital, do not easily recognize the value of information beyond the most urgent needs of everyday life. Nevertheless, the fact that such sectors are not frequently in a position to appropriate the contents by their own means is utterly disturbing. In addition to this, and paradoxically, in this over-communicated world, we were able to identify difficulty accessing and using information from the immediate surroundings, the city itself, or even the neighborhood, particularly the most necessary and relevant data to achieve social integration. (Sabelli, 2012b)

3.1 Projects

-**Project** *Towards Building Information Services for the Community: a study of access and use of information by women from unfavorable contexts (zone 9 of Montevideo)*, in the future, referred to in the text as *Project Women and inclusive information*, 2008-2010, EUBCA, selected and supported by the University of the Republic's CSIC (Sector Commission for Scientific Research) in their official call aimed at Social Inclusion and the Metropolitan Integration program (PIM). The research team is composed of library and information science teachers and researchers, and sociologists. Responsible: Martha Sabelli, associate researcher and advisor in the topic (women) Verónica Rodríguez Lopater, associate researcher Ingrid Bercovich, assistant researcher Paulina Szafran Maiche, and student interns Liliana Chávez, Graciela Mallet, Jimena Núñez, Lucia Valeta, and Diego Aguirre

The unit of analysis were young women and adolescents - users/non-users of information living in disadvantaged contexts in an area of Montevideo characterized by precarious neighborhoods called "asentamientos".

Publications:

Sabelli, M. & Rodríguez Lopater, V. (comps.) (2012); Sabelli, M. (2012a); Sabelli, M. (2012b), . Sabelli, M., Rodríguez Lopater, V., Bercovich, I.&, Szafran Maiche, P. (2012).

- Project *Information and Communication Strategies Focused on Young People and Adolescents Within the Field of Public Health: Analysis and Proposals* **(RAP [Level One Attention Network] -** *ASSE* **[State Health Services Administration] zone 9 of Montevideo),** 2010-2012, in the future referred to in the text as *Project Adolescent and Health Services*, selected and financially supported by the Information and Communication Academic Development Program – PRODIC. It was carried out throughout the period 2010-2012 by the GIISUR Group - *Research group on information and communication for social inclusion and integration* of the University of the Republic (Uruguay), created in 2009 by researchers on Information and Library Science, Communication Science, Computer Engineering, Sociology, and Social And Cultural Anthropology, addressing the social issues to be solved from the complementary and coordinated perspectives of the disciplines mentioned above (Sabelli et al. 2013, Sabelli et al. 2014). The final report was published in 2015 (Sabelli and Rasner, 2015).

Responsible: Martha Sabelli and Jorge Rasner. Teams: sub-team of the School of Engineering's Institute of Computing: Laura González, Flavia Serra, advisor Raúl Ruggia. Sub-team of Information Science, Paulina Szafran, María Cristina Pérez Giffoni, Jimena Nuñez Ansua, Lucía Valeta, Graciela Mallet, Sociologist Ingrid Bercovich, Lourdes Díaz (2014-2015), Andrea Cristiani (2014-2015) and Carol Guilleminot (2014-2015). Sub-team of Communication: Eduardo Alvarez Pedrosian, Victoria Cuadrado, Gonzalo Cortizo, Pamela Viera.

The subject-object of this research, carried out in the period, are the vulnerable population communities in Montevideo's disadvantaged neighborhoods. In particular, the research focuses on teenagers called *"Ni Ni"* (young people and teenagers who neither study nor work) and how they access, search, and use health-related information. This topic is of great interest given the recent implementation (2008) of the Integrated National Health System in the country and the development of health services in primary care, which focus on these

social sectors.

The project continued when it was presented and selected in the FIC call for Prodic research groups in 2013-2015: *Information and communication strategies focused on young people and adolescents in the field of health: analysis and proposals (RAP-ASSE, Paysandú, 2014-2015).* Therefore, the study had a second stage during the years 2014-2015 by research group GIISUR in Paysandú; the research was developed in a small city in the North of the country (Paysandú capital) in order to carry out a comparative analysis with the project implemented in the capital city Montevideo (2010-2012). Its objective was to collect data with the support of teachers and students. The GIISUR interdisciplinary team moved to the University of the Republic campus in Paysandú university center for several periods. The comparison between the results of the two projects was based on the similarities and differences of these results, as well as the diverse points of view of the interdisciplinary research team.

Publications:
Sabelli, M. (2014); Sabelli, M. (2015a); Sabelli, M. (2015b); Sabelli, M. (2016); Sabelli, M. & Rasner, J. comp. (2015); Sabelli, M., Rasner, J., Pérez Giffoni, M. C., & Álvarez Pedrosian, E. (2013); Sabelli, M., Rasner, J., González, L., Pérez Giffoni, M.C.; Álvarez Pedrosian, E. & Ruggia, R. (2014); Miguel, A., Montero, L., Saint Martin, I. (2019).

- **Project** *Perspective of old age and gender in disadvantaged environments: towards inclusive strategies of information and communication, The Ibirapita Plan and the Attention System* (April 2017 to April 2019), in the future referred to in the text as *InfoCoMayores Project,* selected and supported by the University of the Republic's CSIC (Sector Commission for Scientific Research). Responsible: Martha Sabelli. Developed in the Information Institute of the School of Information and Communication of the University of Republic, Research Group GIISUR.

The research team of the *InfoCoMayores* project was formed by information science researchers, sociologists, communication scientists, and computer engineers. They worked in two university-level sub-teams and acted independently of the Ibirapitá Plan. The first one will be called the FIC team, which has ten years of experience in researching information behavior in disadvantaged backgrounds research, is responsible for the presentation and

coordination of the project, is formed by one information science senior researcher, five information science junior researchers and a sociologist, and information science students, who carried out the study of informative behavior: Carol Guilleminot, Andrea Cristiani, Jimena Nuñez, Paulina Szafran, Lourdes Díaz, Ingrid Bercovich. The second one is the *INCO* team of the School of Engineering's Institute of Computing, incorporated in the second year of the project research, which was carried out by three students in the development of their undergraduate project entitled *Portal de accesibilidad del Plan Ibirapitá* [Portal of accessibility of the Ibirapitá Plan] of Alejandro Miguel, Luciano Montero, and Inés Saint Martin, guided by the teacher tutors Cecilia Apa, Ewelina, Bakala and Laura González, and the honorary advisors Rosario Aguirre (Sociology, gender) and Raúl Ruggia (Computer Engineering).

Publications
Sabelli, M. (2020a); Sabelli, M. (2020b);. Sabelli, M. comp.(2023 in press)

- Project *Inclusive and integrative information for families of children and adolescents with Autism Spectrum Disorder (ASD): access, use, appropriation, and mediators. InFam-ADS*

It is a research project selected and supported by the University of the Republic's Sector Commission for Scientific Research (CSIC) in the 2020 call for R&D projects. It is developed at the Information and Society Department, Information Institute, at the School of Information and Communication of the University of Republic, together with the Pediatrics Chair C of the School of Medicine. Martha Sabelli (FIC, Udelar) and Ana Laura Casuariaga (Faculty of Medicine, Udelar) are in charge of the project. Team members: School of Medicine: Noel Cuadro (2021-2023), Carolina Álvarez (2021-2023); Information Institute: Raquel Chávez (2021), Andrea Cristiani (2021-2023), Carol Guilleminot (2021-2023), Ingrid Bercovich (2021-2023), Patricia Choca (2021-2023) and María Eugenia Arrejuría (2022-2023). The project has two highly-qualified honorary advisors: Prof. Dr. Gustavo Giachetto and Dra. Kristin Sohl. The project's background is the final thesis of a recent graduate with the Bachelor's Degree in Library Science, entitled *Comportamiento informativo de familiares de personas con Trastorno del Espectro Autista (TEA): un estudio de caso* (Chávez, 2019) ["Information Behavior of Family Members of People with Autism Spectrum Disorder (ASD):

A Case Study"], defended in November 2019 and a participant of the team in the first year 2021.

The scenario exposed in Chávez's study challenges us in this study; it shows us distressing situations that overwhelm members of a society that does not show knowledge about and solidarity with the problems of the families of 1 in 88 children born with ASD in Uruguay.

In this sense, we intend to investigate the access, the flow of information and communication, and the appropriation of information content about their children with ASD by family members in the contexts of their daily lives, as well as the sources of information they access and use, taking family members and professional and social mediators as the unit of analysis. The project aims at ordinary citizens whose children have some form of ASD. Inclusive information is an essential bridge for empowering families and social mediators involved in supporting children with ASD.

The gender perspective is considered based on the results of the FIC team's research background, Chávez's research (2019), and the international ones cited. Mostly, women assume the care of children with ASD, confirming the statements made on gender in the InfoCoMayores Project. The complexity of this informative phenomenon supports the creation of the aforementioned interdisciplinary team, specialized in the area of informative behavior of Information Science, and of a national and international team highly specialized in the area of ASD in Medicine.

Publications
Chávez, R. & Sabelli, M. (2020)

3.2 Research objectives

The objectives of the four research projects in this stage emerged, on the one hand, from the research processes and the results on the information behavior of communities of ordinary citizens in unfavorable situations in the first stage. On the other hand, from the views and ideas supported by the project leaders and

teams concerning the deficiencies and limitations in the access, use, and appropriation of necessary, relevant, valuable, and reliable information for the personal and social development of social sectors in unfavorable situations and, especially, vulnerable in the contexts in which they live.

The exposed results of the first stage showed a greater vulnerability in young and adolescent women but also older women. The gender perspective emerged from the studies without being a preconceived proposal, which further legitimizes the orientation of the projects, intertwined with each other and forming a spiral built from the interdisciplinary work with and for the communities investigated.

In order to know the objectives as well as the next headings, we refer to and suggest the publications cited, available and of public access, authored by the project teams, where the dimensions and research questions, the results, the main reflections and perspectives are inserted.

3.3 Theoretical and methodological references

As in the first part, each project had specific reference frameworks related to the typology of the communities studied in unfavorable situations (young women and adolescents, older women, relatives of children and adolescents with ASD) in relation to the access, use, and appropriation of inclusive information according to their needs. It is worth mentioning the permanence of the "master" Tom Wilson, who continued to guide us with his ideas, research, and Tom Wilson's models 1981, 1997, 2020 and the contributions from contemporary ethnographic and phenomenological perspectives (Wilson 1981, 1984, 1997a,b, 1999a,b, 2006,a,b).

Consistent and closely related to these approaches is the social constructionist of Sanna Talja, Touminen et al. (2005, 2007, 2015) and significantly, closely interrelated with the study of disadvantaged communities in their daily lives, the Everyday Life Information Seeking (ELIS) of Savolainen (1995, 2002, 2004, 2005, 2008a, 2008b), Agosto. & Hughes-Hassell (2005), Hersberger (2001, 2002-3, 2005), and the precious contributions of Elfreda Chatman (1996, 1999). Finally,

the influence of the ideas and theory of Karen E. Fisher (2004, 2005, 2006, 2007) and J. Bronstein (2017, 2018, 2019) and S.Buchanan et al (2019) about the role of information intermediaries.

It is worth noting the great contribution of the two fundamental books of the 2000s, essential for postgraduate courses and the updating of interdisciplinary concepts. The book by Donald O. Case and L.M.Given (2016), a new edition to be published this year, and that by Karen E. Fisher, Sanda Erdelez & Lynne Mckechnie (2005).

The publications corresponding to each project include the bibliography consulted and cited.

Women and Inclusive information and Adolescents and Health Services Projects

The theoretical-methodological approach is based on the contributions of information behavior theories, especially the one on information poverty (Chatman, 1987, 1996, 2005; Le Dantec, 2011), the social constructionist perspective, research in the area of ELIS (Savolainen, 2008a), studies referred to Lay Information Mediary Behavior (LIMB) and information ground theory (Fisher et al., 2005; Fisher, Durrance and Hinton, 2004; Fisher, Landry and Naumer, 2007), and others.

These referents helped us comprehend the information behaviors and information practices of a particular community of users (adolescents in vulnerable contexts) and the potential mediators in the field of health care (health care staff of primary health care services). It is a complex phenomenon where actors perform in different *situations and places*. Contributions from LIMB, the "*information ground"* theory, and the conceptualization and valuing of the "*place*" in everyday life were significant for our project. These concepts have been reviewed and analyzed in papers about the "*information worlds of individuals*" by Liangzhi Yu (2011). Discussion arising from the topic and the approach of space, "*the places,*" and the temporal dimension promote new reflections on Popper's *three worlds*.

- *InfoCoMayores Project*

Within the framework of the *InfoCoMayores* Project, an extensive and exhaustive bibliographic compilation has been carried out. It is a bibliography of national,

regional, and global scope, covering 132 articles, papers, and books addressing the subject of the elderly and tablets from different disciplinary approaches. The relevant topics have to do with the focus of the project and have been characterized by their specificity concerning the research's topics of interest and seeking to represent in it the plurality of approaches to the same topic.

In the line of theoretical-methodological referents of the project above, the study is crossed by an interdisciplinary look fed by selecting some approaches that help to explore and understand the informative behavior better. Among them, we highlight the concept of information poverty and the role of mediators by Elfreda A. Chatman, who, in the 1980s and 1990s, did research on women in situations of information poverty. Her theory on the concept of *the life on the round* (Chatman 1987, 1992, 1996, 1999, 2001) of poor women living in information poverty marks a new and precious interdisciplinary approach to our older women in *small worlds*. She defines the concept as "a public form of life in which things are implicitly understood" (Chatman, 1999, p. 212) and analyzes information flow between insiders and outsiders in these small settings. His theory on information in contexts of poverty formulates factors that influence the needs and access to information in these communities: secrecy, deception, risk-taking, and the relevance or usefulness of the situation (Chatman, 1996, p. 195-197).

Reijo Savolainen's and his colleagues' notion of the phenomenon of information as practice, which has social constructionism as a reference, is central to our exploration of the subjects-objects of study in their everyday life, and we accompany the ELIS model approach. Its approach and the application of qualitative methods, including discourse analysis of people's perceptions of their competencies as information seekers and users, constitute an essential contribution to this work proposal (Savolainen, 1999, 2002, 2004, 2005, 2008a,b).

Research on the role of information mediators and the notion of *information ground* by Karen E. Fisher (ex K. E. Pettigrew) and her co-authors (Fisher et al. 2005, 2006, 2007) are innovative contributions to Information Science and the field in particular.

 The bibliography recovered on older adults and ICT is broad and interdisciplinary. Between the main referents on third agers as users of tablets are

authors from the United States, Australia, the United Kingdom, and the Nordic countries. The pioneer works of Williamson and colleagues (1980, 1996, 1997, 2009, 2010, 2015) and most recent works from diverse disciplines, like those by Alvseike et al. (2011), Barnard et al. (2013), Magsamen-Conrad et al. (2015), Veinot& Williams (2012), Vorrik et al (2017), Vroman et al. (2015), Wright (2014), are also relevant to this research.

 - *InFam-ADS Project*

The project continues with the framework of the previously mentioned referents, especially Chatman, Savolainen, Fisher, and colleagues.

The literature on the informational behavior of parents of children with ASD is very scarce; Chávez (2019) reviews five investigations: Gibson, Kaplan, and Vardell (2017), Grant, Rodger, and Hoffmann (2015), Hartley, Barker y Seltzer, et al. (2010), Mackintosh, Myers y Goin-Kochel (2005), Martinović y Stričević (2016) identified as the closest antecedents to their recent research (2019) and as mentioned above, motivating this research project. Some works have been significant referents of empirical research conducted in different countries. They all express the absence of studies on the access and flow of information of family members of people with ASD or other different capabilities.

Some research resulted in a significant contribution to elaborate the project, for example, the articles by Gowen, Christy, & Sparling (1993), Murphy & Tierney (2006), Bilal (2010, July), Mitchell& Sloper (2002), O'Reilly, Karim, & Lester (2015), Mulligan, Steel, MacCulloch, & Nicholas, D. (2010), Walker's book (2012), and we highlight the very recent article from China by An, Na, & Zhang, (2019).

3.4 Typology of user communities, objectives, and territorial scope

3.4.1 Project *Women and Inclusive information.*

Territorial scope: zone 9 of Montevideo (neighborhoods Flor de Maroñas, Jardines

del Hipódromo, Villa García).

From an interdisciplinary perspective, it focuses on the obstacles, barriers, and facilitators to access, use, and appropriation of information by citizens, especially young women in poor or destitute conditions. Emphasis is placed on existing problems concerning the information flow and on accessing the most relevant sources of information related to topics identified as relevant by the civil society: health, teenage pregnancy, training and incorporation to the labor force, local identity, and citizenship building.

In the territory mentioned above, a social network called *Red Camino Nordeste* operates, whose members (social workers, doctors, professors, teachers, and social educators) helped to create the basis for this research, working with us to identify the problems to consider.

Among the objectives it was highlighted: identify policies and program actions, as well as public and private services designed to promote and facilitate access, use, and appropriate information by citizens in unfavorable environments while investigating their objectives and strategies of communication with real and potential users; analyze the obstacles and facilitators for the inclusion of women in the information flow; study their needs and seeking behaviors, access, and use of information products registered in various media and channels; meet and interpret the perception of the recipients and mediators of services; collaborate from the results of our research to the policies, strategies, and actions for building a system and information services at a local level, together with various organizations and civil society actors.

Research questions took into account the following dimensions or aspects: the first aspect was related to public information policies aimed at social inclusion: Are there public information policies focused on citizens in unfavorable contexts? The second aspect was centered on young women as users/non-users of information: Do women in unfavorable contexts need information? Are they aware of this need and hence demand such information? What kind of information is needed/desired and/or requested? Are these needs and demands satisfied? What is the situation regarding the use of ICTs, especially the Internet? What are the attitudes/aptitudes towards ICTs? What are the obstacles, barriers, and "bridges"

in the process of creating habits regarding the access, use, and appropriation of traditional and electronic information? The third aspect to be studied refers to the subject-mediator: What is the perception of the institutional mediator (public organizations and NGOs that aid women)? How do mediators address policies, strategies, and actions? How do they evaluate their results and impacts? What is the perception of mediators regarding library information services (librarians, volunteers at popular libraries)? What is their approach to policies, strategies, and actions in case of problematic issues?

3.4.2 Project *Adolescent and Health Services*.

Territorial scope: zone 9 of Montevideo (2010-2012) (neighborhoods Flor de Maroñas, Jardines del Hipódromo, Villa García) and underprivileged neighborhoods of the city of Paysandú (2014-2015).

The interdisciplinary group (Library Science and Information Sciences, Communication Sciences, Computer Engineering, Sociology, Social and Cultural Anthropology, Education, Primary and Secondary School Teacher Training, Philosophy, and Cultural Management) addressed the social issues to be resolved from the complementary perspectives of the disciplines that intervene and work in coordination throughout the investigation.

The target population investigated are male and female adolescents living in poverty, residents in the Integral Metropolitan Program (PIM) territory corresponding to zone 9 of the Department of Montevideo, and, more specifically, in the area comprised by the Northeast Road Network. The neighborhoods were selected as in the Project presented above: Jardines del Hipódromo, Flor de Maroñas, Bella Italia, and Villa García. Primary health care services of the Ministry of Public Health, community polyclinics, and the Government of Montevideo are located there.

From a multidisciplinary and interdisciplinary approach, this research sought to

know the needs and behaviors in the access, search and use of information of adolescents and young people, actual and potential users of these health services. At the same time and in an articulated manner, to identify, describe, and analyze the current communicational flow in these organizations from the perspective of the informational needs of the adolescent or young health service user-subject. Furthermore, on that basis, to strengthen the process of design, dissemination, and promotion of resources and services available in health information through ICTs.

3.4.3 Project *InfoCoMayores*

The Project *Older women and their tablets of the Ibirpitá plan* was developed in the Department of Paysandú (cities of Paysandú and Quebracho) and the Department of Rocha (cities of Rocha and La Paloma). The Ibirapitá Plan provides a tablet for every low-income retired woman in Uruguay. At the end of the project's first year (2017), 170,000 free tablets for people over 65 were distributed, and currently, they have reached 230.000 (late 2019), a significant figure for a small country of approximately 3.5 million inhabitants. The main objective is to contribute to the studies of older women's information behavior with their tablets in the context of a National Plan.

The project's objective has been to contribute to the studies of information behavior and information practices of older women living in unfavorable contexts and the use of tablets in the context of a National Plan that distributes tablets to all older adults in disadvantaged situations. Two specific aspects are raised from a constructionist perspective: 1) the approach based on the understanding of the social construction of information and communication by older women and their tablets; 2) the design, creation, implementation, and evaluation of new content of quality local information for tablets (digital products) in a participatory approach of the users and the interdisciplinary team (Information Sciences, Communication, Sociology, and Computer Engineering).

The objectives for the first year of the project were: evaluating state of the art in information behaviors and information practices of older women concerning ICT;

identifying the information needs of the older women of the Ibirpitá plan in their family and community contexts; describing the relationship that older women of the Ibirapitá plan have with sources and resources of electronic information in two different regions of the country; and selecting and collecting local information in the two regions chosen, according to the results of the information behavior study.

The objectives for the second year of the project were: to provide the tablets with quality local informational content that motivates the search for inclusive information by users in the selected regions; the participatory design and construction of a digital information product for tablets; to develop interdisciplinary research between two teams made up of different disciplines and university services; and to evaluate the results in the light of theoretical references.

3.4.4 Project *InFam-ADS*

As mentioned above, the project's general objective is to know, understand, and interpret the needs, behavior, and information practices of family members and professional and social mediators of children and adolescents with ASD. We will work closely with associations and groups of family members in Montevideo as well as in two departments of the interior of the country (Salto and Paysandú) on which information was collected. Four dimensions were identified to guide the research questions: a) access, use, and appropriation of information; b) obstacles and facilitators in the access and use of information; c) role of professional and social mediators; and d) perception of professional and social mediators.

3.5 Methods

The main ideas, theories, and methods of the four investigations are presented in

detail in the publications of each project. The emphasis is placed on the adaptation to the typology of the subjects studied and the role of social mediators. The theoretical and methodological references, learning, and the impact of each project's results on subsequent ones are analyzed. Public information policies aimed at these social sectors are also considered.

- **Project *Women and Inclusive information***

The research strategy is based on qualitative methods: observation, focus groups, workshops, and in-depth interviews: a. in the beginning, 22 in-depth interviews with qualified informants selected among social mediators; b. 101 in-depth interviews with young women and adolescents users of different organizations and services in the area; c. analysis of 167 documents and data produced for the community by national and local organizations and services operating in the area; d. two focus groups, one aimed at young mothers in a CAIF (Child and Family Care Center) and the other working with teenagers in one community classroom; e. interviews with people in charge of libraries, cyber cafes, and free telecentres; f. in-depth interviews with mediators as information users (user study); and g. focus group of mediators at the end of the research project.

- **Project *Adolescents and Health Services***

In order to collect the necessary information, the research strategy was based on the following sources of qualitative nature: a) 11 in-depth interviews with qualified informants selected among social mediators from primary health care services; b) 50 in-depth interviews with adolescents; c) observations in waiting rooms at primary health care attention services; d) design and redesign of a web portal (*Your Health Site*) by the team of computer engineers based on the analysis of data collected in points a, b, and c; e) two stages of workshops with adolescents, who had access to and used *Your Health Site* using qualitative methods of observation, brief interviews, and focal groups.

- **Project *InFoMayores***

A mix of methods was applied (Paysandú and Rocha): in-depth interviews with qualified informants (15), a questionnaire (a survey with open and closed questions to a sample of 163 users and 21 non-users of the Ibirapitá Plan), in-

depth interviews with qualified informants and trainers (interviews with 10 trainers), observation of 15 tablet-distribution workshops, focus groups and validation workshops of the digital solution designed for tablets applied in two capital cities (Paysandú and Rocha) and two small towns (Quebracho and La Paloma) with the collaboration of community organizations; 7 focus groups with older women and their tablets; research on local information, identification, and collection.

In the second year (May 2018 - April 2019), the following activities were carried out by FIC and INCO teams: focus groups with the older women to deepen the identification of their local information needs, design of a digital information resource by INCO team in collaboration with the FIC team, two stages of participatory workshops with users to validate the product designed for tablets with local information in the selected cities. These were organized by the FIC team, supporting participatory validation of the product by older women. Some of them participated in the focus groups.

Finally, in-depth interviews with the trainers as mediators were carried out in Paysandú and Rocha, and in the last two months of the project, volunteers were interviewed; this was a new figure created to support the plan.

- **Project *InFam-ADS***

The research methodology uses qualitative techniques to interpret and understand the meaning and sense of the information. The data collection techniques are in-depth interviews with qualified informants and questionnaires to family members and professional and social mediators. The data collection techniques mentioned below have been applied in the projects with excellent results in the period 2008-2019: 10 in-depth interviews have been applied to qualified informants (10), professionals, and technicians in the health area, and 8 to members of the management or commissions of associations of families of children and adolescents with ASD. The interviews were recorded and transcribed with the consent of the anonymity of the interviewees. The analysis was carried out using the MAXQDA qualitative analysis software purchased by the project.

The survey planned for the second year was transferred to the third year (2023) due to problems related to the pandemic and its impact on health professionals

and technicians, and families. The questionnaire will be applied in the first months of 2023 to intentionally selected family interviewees, with closed and open questions, with a number between 70 to 100, considering the saturation of the information obtained. A questionnaire will also be applied to professional and social mediators (pediatricians and other specialties related to children with ASD, members of family associations) with closed and open questions ranging between 20 and 30. Focus groups composed of mothers in vulnerable situations will be a fundamental research method.

The analysis of transcripts of the interviews with qualified informants, open-ended questions from the questionnaires, and the speeches of the focus groups will be analyzed with MAXQDA for the assignment and linking of codes. The structure that will govern the analysis will be organized according to the analysis dimensions and the questions the project seeks to answer.

3.6 Some results to consider from the second stage

Considering the results is more appropriate from the approach of external evaluators and specialists in the disciplinary field and, more relevantly, because of the wide diversity of social and political actors and people involved as subjects object in the research. The perspective from the "inside" is biased by experiences throughout personal and group academic experiences, but also in the relationship with communities, not always similar and consensual. Therefore, what is expressed here responds to a vision of the author, a starting point for discussion by those who participated with commitment and sense of belonging in these years of unavoidable and permanent challenges, in a complex path such as approaching the life of human beings in a daily life characterized by information poverty.

From our perspective, we selected those results identified as the most relevant, sought after but sometimes accidental, which (serendipity?) appear as unalterable and singular traces in a path full of beliefs and optimism concerning ordinary people. Therefore, we avoid reviewing written notes, whether personal or shared

in co-authorships. Readers can go directly to the reports published in books, articles, and chapters.

First, check the close relationship between empirical research and theoretical perspectives, step by step, project by project, how the relationships between research processes, results, and some of the outstanding ideas of our beloved theorists (among them Wilson, Chatman, Savolainen, Fisher and colleagues, Brenda Dervin) were tightened. Although we did not talk about models, each idea and theory could be confirmed. We leave it to others to opine and identify the influence of the models; we have not opted for a specific one, and in fact, we are not aware of the influence of each, undoubtedly enormous and permanent.

Secondly, the initial concern, supported by the background of the first stage, as mentioned, for the construction of what we call inclusive information, overcoming what we differentiated early on and called the information gap, differentiating it from the digital gap in the 90s, which guided our doctoral thesis in the early 2000s (Sabelli, 2008). In this way, we collaborated in forming the GIISUR Group, interdisciplinary and united in pursuit of social inclusion and integration through information and communication. Each project manifested shortcomings and limitations in the information and communication flow phenomena from inside and outside the surveyed communities and made proposals.

Thirdly, the discovery of new dimensions related to the results of each investigation applied in the subsequent one. In this way, the encapsulation of young women and adolescents helped us discover in the dialogue with them a new revelation for us, possibly debatable: the lack of life projects, related to low self-esteem, makes information and the consequent search, that is, to be informed, unnecessary. A daily life characterized by the poverty of information, only altered when "a fire" occurs, an unavoidable need in their daily life, basically inserted in their immediate context: their home and children. However, when asked who they resorted to, the mother appeared, but also the health staff of the polyclinics and primary care health centers of the recently created National Integrated Health System (SNIS). Likewise, to perceive the condition of the *Ni Ni*, a social and cultural problem of the country, both female and male adolescents, who were at the center of the *Project of Adolescents and Health Services*.

Fourthly, finding that reliability appears as a *sine qua non* condition both in the flow of information within the community and in the researcher-researched relationship. Over the 30 years of research, its presence in the approaches and improvements of the projects has been unquestionable. A reason for conversation when starting research teams; in five minutes, a trust gained in years of work with the community can be lost.

Health information, or more precisely from health services, in fifth place, clearly emerges as a place, a third place, created by the SNIS by incorporating more than a million people in a country of just over 3 million. Our research subjects objects go there, especially women.

Sixth, to include in the second and third projects the development of information resources and not limit ourselves to studying information behavior. Therefore, it was extended towards a participatory construction and evaluation with the researched community. In keeping with ICT times, designing electronic information resources in an interdisciplinary and participatory manner and evaluating them jointly was not only a substantial contribution to the results but also, they feel that their opinions and suggestions are respected, being part of a community of practice.

Finally, and continuing in the final reflections, the role of the so-called *social mediators of information*; without them, it is not possible to create the essential bridges with the potential users of desirable, necessary, and pertinent information who live in social isolation in small worlds, and harmed with false or inadequate information.

Finally, we must also say that Uruguay is a somewhat complex country, with discourses often inconsistent with the desirable and urgent actions in public information policies. Although the policy designs and their rapid implementation - not adequately disclosed at the end of the period - in 2005-2019 were very estimable, among them the agendas of ANII, Ceibal Plan, and Ibirapitá Plan.

3.7 Final reflections

Reflecting today with optimism and hope is complicated. These are times of uncertainty, where death is around the corner; millions of people must leave their homes because of war or lack of food, and vulnerable sectors are growing worldwide. These are days when algorithms connect and penetrate our lives and identities, making us doubt where they are created and their purposes. Political, economic, social, and cultural power is increasingly concentrated; in short, so is the creation and dissemination of information. The future of the discipline of the field of information behavior is embedded in this present and near future.

Nevertheless, we must face these challenges and encourage the new generations; there have always been tools, sources, resources, and information services possible to create and use, even in very adverse situations and with few resources. In this challenge, we believe that we must act together with the social mediators of information to build a model. We assume this debt, dilated by the multiple academic activities, to write about them, collecting the experiences of the projects and trying to approach a modest theory full of the writer's limitations. It is a promise, in the end, if life allows us.

References

Abrahamson, J. A. & Fisher, K. E. (2006). Modeling the information behavior of lay mediaries. *Proceedings of the American Society for Information Science and Technology*, 43(1), 1-4. Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/meet.14504301257/pdf

Abrahamson, J.A. & Fisher, K.E. (2007). 'What's past is prologue': towards a general model of lay information mediary behaviour. *Information Research*, 12(4). Retrieved from http://InformationR.net/ir/12-4/colis/colis15.html

Abrahamson, J.A., Fisher, K., Turner, A.G., Durrance, J.C. & Turner, T.(2008). Lay information mediary behavior uncovered: exploring how nonprofessionals seek health information for themselves and others online. *Journal of the Medical Library Association*, 96(4), 310-323. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2568838/

Agosto, D. E. & Hughes-Hassell, S. (2005). People, places, and questions : an investigation of the everyday life information-seeking behaviours of urban young adults. *Library & Information Science Research*, 27 (2), 141-163.

Alvseike, H., &Brønnick, K. (2011). Feasibility of the iPad as a hub for smart house technology in the elderly; effects of cognition, self-efficacy, and technology experience. *Journal of multidisciplinary healthcare*, *5*, 299-306.

An, J., Na, Y., & Zhang, P. (2019). How do parents of children with ASD use information grounds to seek for ASD-related information?. *Proceedings of the Association for Information Science and Technology*, *56*(1), 10-20.

Asla, T. M. & Williamson, K. (2015). Unexplored territory: information behaviour in the fourth age. In *Proceedings of ISIC, the Information Behaviour Conference, Leeds, 2-5 September, 2014: Part 2*, (paper isic32). Retrieved November 22,2019 from http://InformationR.net/ir/20-1/isic2/isic32.html (Archived by WebCite® at http://www.webcitation.org/...)

Barnard, Y., Bradley, M. D., Hodgson, F., & Lloyd, A. D. (2013). Learning to use new technologies by older adults: perceived difficulties, experimentation behaviour and usability. *Computers in Human Behavior*, *29*(4), 1715-1724.

Belkin, N. (1982) Anomalous states of knowledge as a bases for information retrieval. *Canadian Journal of Information Science* 5:133-43, 1980

Belkin, N., Oddy, R. N. & Brooks, H.M.(1982a) ASK for information retrieval : Part I. Background and theory . *Journal of Documentation* 38(2):61-71, June 1982.

Belkin, N., Oddy, R. N. & Brooks, H.M.(1982b). ASK for information retrieval: Part II. Results of a design study. *Journal of Documentation*38(3):145-164, Sept. 1982.

Bertone, A., Peluffo, G. & Katz, R. (2012). *Sistema colaborativo para la integración de información y servicios en el ´rea social y de la salud: Tu Sitio Salud.* Tesis de grado - Ingeniería en Computación. Montevideo: INCO, Facultad de Ingeniería, Udelar

Bilal, D. (2010, July). The mediated information needs of children on the Autism Spectrum Disorder (ASD). In *Proceedings of the 31st ACM SIGIR Workshop on Accessible Search Systems, Geneva, Switzerland* (pp. 42-49). Geneva: ACM.

Bronstein, J. (2017). Information grounds as a vehicle for social inclusion of domestic migrant workers in Israel. *Journal of Documentation*,*73* (5), 934-952

Bronstein, J. (2018). Domestic migrant workers in Israel: the strength of weak ties. In *International Conference on Information,* pp.429-434, Springer, Cham

Bronstein, J. (2019). A transitional approach to the study of the information disadvantaged and dependent circumstances and the role of information intermediaries. *Journal of the Association for Information, 70* (2), 117-129

Buchanan, S., Jardine, C., & Ruthven, I. (2019). Information behaviors in disadvantaged and dependent circumstances and the role of information intermediaries. *Journal of the Association for Information Science and Technology*, 70 (2), 117-129.

Case, D.O., & Given, L.M. eds. (2016). *Looking for Information: A Survey of Research on Information Seeking, Needs, and Behavior*. Emerald Group Publishing

Chatman, E.A. (1992). *The information world of retired women.* Greenvook Press

Chatman, E. A. (1987). Opinion leadership, poverty and information sharing. *R.Q.,* 26(3), 341-353.

Chatman, E. A. (1996). The impoverished life-world of outsiders. *Journal of the American Society for Information Science*, 47(3), 193-206.

Chatman, E. A. (1999). A theory of life in the round. *Journal of the American Society for Information Science,* 50(3), 207-217.

Chatman, E. A. (1999). A theory of life in the round. *Journal of the American Society for Information Science, 50*(3), 207-217

Chatman, E.A. (2001). *An insider/outsider approach to libraries, change, and marginalized populations*. Keynote address presented at the National Conference: "Alteration of Generations". Boras, Sweden. April 23-25, 2001. Retrieved 21 November, 2012 from http://bada.hb.se/bitstream/2320/4948/1/Chatman01.pdf (Archived by WebCite® at http://www.webcitation.org/6CLSC5qo8)

Chávez, R. & Sabelli, M. (2020). Information behaviour of parents of children with autism spectrum disorder (ASD): a case study. In *Proceedings of ISIC, the Information Behaviour Conference, Pretoria, South Africa, 28 September - 1 October, 2020. Information Research, 25*(4), paper isic2014. Retrieved from http://InformationR.net/ir/25-4/isic2020/isic2014.html (Archived by the Internet Archive at https://bit.ly/348iO85) https://doi.org/10.47989/irisic2014

Dervin, B. & Nilan, M. (1986) Information needs and uses. ARIST 21:3-33

Davies, E. (2005). Communities of practice. In K. E. Fisher, S. Erdelez, L. McKechnie (Eds.). *Theories of information behaviour*, (pp. 104-107). Medford, NJ: Information Today.

Fisher, K. E.; Erdelez, S. & Mckechnie, L. (Eds.), 2005. *Theories of information behavior.* Medford, New Jersey: Information Today

Fisher, K. E., Durrance, J. C., & Hinton, M. B. (2004). Information grounds and the use of need-based services by immigrants in Queens, New York: A context-based, outcome evaluation approach. *Journal of the American Society for Information Science and Technology*, 55(8), 754-766.

Fisher, K.E., Landry, C.F. & Naumer, C. (2007). Social spaces, casual interactions, meaningful exchanges: "information grounds" characteristics based on the college student experience.*Information Research*, *12*(2) paper 291. Retrieved 22 November, 2019 from http://InformationR.net/ir/12-2/paper291.html (Archived by WebCite® at http://www.webcitation.org/6CK74WxQj)

Fisher, K. E., Marcoux, E., Miller, L. S., Sánchez, A. & Cunningham, E. R. (2004). Information behaviour of migrant Hispanic farm workers and their families in the Pacific Northwest. *Information Research*, 10(1). Retrieved from http://www.informationr.net/ir/10-1/paper199.html

Fisher, K. E. & Naumer, C. M. (2006). *Information grounds: theoretical basis and empirical findings on information flow in social settings*. In A. Spink & C. Cole (Eds.), *New directions in human information behaviour* (pp. 93-111). Amsterdam: Kluwe

Fisher, K.E, Naumer, C., Durrance, J., Stromski, L. & Christiansen, T. (2005). Something old, something new: preliminary findings from an exploratory study about people's information habits and information grounds.*Information Research*, *10* (2) paper 223. Retrieved from http://InformationR.net/ir/10-2/paper223.html. (Archived by WebCite® at http://www.webcitation.org/6CK79Y8OT)

Gibson, A.N., Kaplan, S. & Vardell, E. (2017). A survey of information source preferences of parents of individuals with autism spectrum disorder. *Journal of Autism Development Disorder*, 47(7), 2189-2204. Retrieved from http://dx.doi.org/10.1007/s10803-017-3127-z)

Gibson, A. N., & Martin III, J. D. (2019). Re-situating information poverty: Information marginalization and parents of individuals with disabilities. *Journal of the Association for Information Science and Technology*, 70(5), 476-487. Retrieved from http://dx.doi.org/10.1002/asi.24128

Gowen, J. W., Christy, D. S., & Sparling, J. (1993). Informational needs of parents of young children with special needs. *Journal of Early Intervention*, 17(2), 194-210

Grant, N., Rodger, S. & Hoffmann, T. (2015). Intervention decision-making processes and information preferences of parents of children with autism spectrum disorders. *Child: Care, Health and Development*, 42(1), 125-134. Retrieved from http://dx.doi.org/10.1111/cch.12296

Hartley, S. L., Barker, E. T. y Seltzer, M. M., et al. (2010) The Relative Risk and Timing of Divorce in Families of Children with an Autism Spectrum Disorder. *Journal of Family Psychology*, 24(4), 449-457 Recuperado de: http://midus.wisc.edu/findings/pdfs/829.pdf

Hersberger, J. (2001). Everyday information needs and information sources of homeless parents. *The New Review of Information Behaviour Research*, 2, 119-134.

Hersberger, J. (2002). Are the economically poor information poor? Does the Digital Divide affect the homeless and access to information? *Canadian Journal of Information & Library Sciences*, 27(3), 45-64.

Hersberger, J. (2003). A qualitative approach to examining information transfer via social networks among homeless populations. *The New Review of Information Behaviour Research*, 4, 95-108.

Hersberger, J. (2005). The homeless and information needs and services. *Reference and User Services Quarterly*, 44(3), 199-202.

Hjørland , B. & Albrechtsen, H.. (1995). Toward a New Horizon in Information Science: Domain-Analysis. *Journal of the American Society for Inf.Science and Techn.* (6): 400-425.

IDRC Project 91-0278. (1992) *International Development Information Network on Research in Progress (IDIN) Phase II.* Montevideo, IDRC.

Le Dantec, C. A. *et al.* (2011). *Publics in practice: ubiquitous computing at a shelter for homeless mothers.* Proceedings of the 2011 annual conference on Human factors in computing systems, CHI '11 (pp. 1687-1696). New York, NY, ACM

Line, M. (1971).The information uses and needs of social scientists: an overview of INFROSS. *ASLIB Proceedings* 23(8):412-434.

Line, M. (1980). Secondary services in the social science : the need for imp rovement and the role of libraries. *Behavioral and Social Sciences Librarian* 1(4):263-273.

Mackintosh, V.H., Myers, B.J. & Goin-Kochel, R.P. (2005). Sources of information and support used by parents of children with autism spectrum disorders. *Journal on Developmental Disabilities*, 12(1), 41-52. Retrieved from https://oadd.org/wp-content/uploads/2016/12/mackintoshEtAl.pdf

Magsamen-Conrad, K., Dowd, J., Abuljadail, M., Alsulaiman, S., & Shareefi, A. (2015). Life-span differences in the uses and gratifications of tablets: Implications for older adults. *Computers in human behavior*, *52*, 96-106. Retrieved from http://dx.doi.org/10.1016/j.chb.2015.05.024

Martinović, I. & Stričević, I. (2016). Information needs and behaviour of parents of children with autism spectrum disorders: parents' reports on their experiences and perceptions. *Information Research*, 21(4), paper isic1609. Retrieved from http://www.informationr.net/ir/21-4/isic/isic1609.html

Miguel, A., Montero, L., Saint Martin (2019). *Portal de accebilidad del Plan Ibirapitá* [Portal of accessibility of the Ibirapitá Plan]. Montevideo, Uruguay (Universidad de la República, Uruguay.Facultad de Ingeniería. Instituto de Computación, Undergraduate dissertation). Retrieved from

https://www.fing.edu.uy/inco/grupos/lins/informes/pg-portal-accesibilidad-ibirapita.pdf

Mitchell, W., & Sloper, P. (2002). Information that informs rather than alienates families with disabled children: developing a model of good practice. *Health & Social Care in the Community*, *10*(2), 74-81.

Mulligan, J., Steel, L., MacCulloch, R., & Nicholas, D. (2010). Evaluation of an information resource for parents of children with autism spectrum disorder. *Autism*, *14*(2), 113-126.

Murphy, T., & Tierney, K. (2006). Parents of children with Autistic Spectrum Disorders (ASD): A survey of information needs. *National Council for Special Education Special Education Research Initiative*.

Nilan, M.S. & Fletcher, P. T (1987) Information behaviors in the preparation of research proposals: a user study. ASIS, v.24: 186-192

Nilan, M.S., et al.(1988) A methology for tapping user evaluation behaviors: an exploration of user' s strategy, source and information evaluating. *ASIS*, v.25: 152-159

Nilan, M.S., et al.(1989) User-oriented interfaces for computer systems: a user-defined online help system for desktop publishing. *ASIS,* v.26: 104-110

Nilan, M.; Newby, G.B. & Duvall, L.M. (1991). Toward a reassessment of individual differences for information systems: the power of user based situational predictors. *ASIS*, 28, 73-81

O'Reilly, M., Karim, K., & Lester, J. N. (2015). Separating 'emotion' from 'the science': Exploring the perceived value of information for parents and families of children with autistic spectrum disorder. *Clinical child psychology and psychiatry*, *20*(3), 500-514.

Pérez Giffoni, M. C., & Sabelli, M. (1995). Aplicación del paradigma alternativo a un estudio de usuarios en el área de la información en Ciencias Sociales en el Uruguay: un aporte metodológico. *Informatio. Revista Del Instituto De Información De La Facultad De Información Y Comunicación*, *1*(1), 53-62. Retrieved from https://informatio.fic.edu.uy/index.php/informatio/article/view/7

Pérez Giffoni, M.C.& Sabelli, M. (1999). Los trabajadores metalúrgicos del Uruguay: un estadio exploratorio sobre sus intereses y comportamiento en relación a la información. *Informatio. Revista Del Instituto De Información De La Facultad De Información Y Comunicación*, *3/4*, 128-146. Retrieved from https://informatio.fic.edu.uy/index.php/informatio/article/view/51

Pérez Giffoni, M. C. & Sabelli, M. (2004). Uso de información electrónica por los académicos de la Universidad de la República (Uruguay). *Información, Cultura Y Sociedad*, (9), 29-52. Retrieved from https://doi.org/10.34096/ics.i9.933

Pérez Giffoni, M.C. & Sabelli, M. (2010a). Los estudios de usuarios de información: construcción de una línea de investigación y docencia en el Uruguay [Studies on information users: building a research and teaching line in Uruguay]. Montevideo: UdelaR. EUBCA

Pérez Giffoni, M.C.& Sabelli, M. (2010b). Estudio sobre necesidades, uso y producción de información de los trabajadores del sector metalúrgico en el Uruguay: el caso de la Unión Nacional de Trabajadores Metalúrgicos y Ramas Afines (UNTMRA). En M.C Pérez Giffoni y M.Sabelli. *Los estudios de usuarios de información : construcción de unalínea de investigación y docencia en Uruguay* (pp.91- 157). Montevideo: Escuela Universitaria de Bibliotecología y Ciencias Afines de la Universidad de la República de Uruguay

Pérez Giffoni, M.C. & Sabelli, M. (2010c) Uso de información electrónica por los académicos de la Universidad de la República: efectos y perspectivas. En M.C.Pérez Giffoni y M. Sabelli. *Los estudios de usuarios de información : construcción de unalínea de investigación y docencia en Uruguay* (pp.205-282).Montevideo: Escuela Universitaria de Bibliotecología y Ciencias Afines de la Universidad de la República de Uruguay

Pettigrew, K. E. (1999). Waiting for chiropody: contextual results from an ethnographic study of the information behaviour among attendees at community clinics**.** *Information Processing & Management*, 35(6), 801-817.

Roberts, N. & Wilson, T. D. (1988). The development of user studies at Sheffield University, 1963-88. *J. Librarianship* 20(4):270-290

Sabelli, M. (2008a)**.** *La información y el ciudadano en el entorno de la sociedad de la información: percepción de los actores políticos y sociales en el Uruguay* [Information and the citizen in the environment of the information society: perception of political and social actors in Uruguay]. Montevideo: Ediciones de la Banda Oriental

Sabelli, M. (2008b). La investigación en las ciencias bibliotecológicas y de información en Uruguay: construyendo una concepción integradora de la investigación, la enseñanza y la extensión universitaria. *Informatio. Revista Del Instituto De Información De La Facultad De Información Y Comunicación*, *11/13*, 39-62. Retrieved from https://informatio.fic.edu.uy/index.php/informatio/article/view/98

Sabelli, M. (2010).Library and information sciences in the information disciplines environment: towards integrative models of disciplines, professional community and information and communication public policies" *Information Research*, 15(4) paper colis720. [Available at http://InformationR.net/ir/15-4/colis720.html]

Sabelli, M. (2012a). Los mediadores en los servicios de la zona 9: sus percepciones y propuestas sobre las brechas informativas de las adolescentes y jóvenes. In M.Sabelli & V.Rodríguez Lopater. *La información y las jóvenes en contextos desfavorables: construyendo puentes para la inclusión social desde la investigación* (pp.107-159)**.** Montevideo: Udelar. Retrieved from https://www.colibri.udelar.edu.uy/bitstream/123456789/6302/1/EUBCA-01_Sabelli_2012-12-10-webO.pdf (Archived by WebCite® at http://www.webcitation.org/6hyVUV5Xh)

Sabelli, M. (2012b). Information behaviour among young women in vulnerable contexts and social inclusion: the role of social mediators**.** *Information Research*, 17(4). Retrieved from http://InformationR.net/ir/17-4/paper545.html

Sabelli, M. (2014). Health care information for youth in vulnerability contexts: designing a website with an interdisciplinary and participatory approach. *Information Research*, 19(4). Retrieved from http://InformationR.net/ir/19-4/isic/isicsp6.html (Archived by WebCite® at http://www.webcitation.org/...)

Sabelli, M. (2015a). Los mediadores de los servicios de salud: percepción sobre el flujo de información / comunicación y el comportamiento informativo de los jóvenes y adolescentes. In M.Sabelli & J.Rasner. *Estrategias de información y comunicación en salud centradas en adolescentes* (pp. 97-132). Montevideo: Udelar. Retrieved from https://www.colibri.udelar.edu.uy/bitstream/123456789/6304/1/sabelli_pdf_l iccom.pdf (Archived by WebCite® at http://www.webcitation.org/6hyW1qEnW)

Sabelli, M. (2015b). Los adolescentes y el acceso y uso de un sitio web sobre salud diseñado desde la investigación universitaria. In M.Sabelli & J.Rasner. *Estrategias de información y comunicación en salud centradas en adolescentes* (pp.215-241). Montevideo: Udelar. Retrieved from https://www.colibri.udelar.edu.uy/bitstream/123456789/6304/1/sabelli_pdf_liccom.pdf (Archived by WebCite® at http://www.webcitation.org/6hyW1qEnW)

Sabelli, M. (2016). Social mediators and inclusive information: communication flow of healthcare information among adolescents in vulnerable communities In *Proceedings of ISIC, the Information Behaviour Conference, Zadar, Croatia, 20-23 September, 2016: Part 1. Information Research, 21*(4), paper isic1608. Retrieved from http://InformationR.net/ir/21-4/isic/isic1608.html (Archived by WebCite® at http://www.webcitation.org/6mHi6O7mb)

Sabelli, M. (2020a). Old women and tablets: information behaviour in unfavourable contexts and social mediators. In *Proceedings of ISIC, the Information Behaviour Conference, Pretoria, South Africa, 28-30 September, 2020. Information Research, 25*(4), paper isic2007. Retrieved from http://InformationR.net/ir/25-4/isic2020/isic2007.html (Archived by the Internet Archive at https://bit.ly/3a5ayK0) https://doi.org/10.47989/irisic2007

Sabelli, M. (2020b). Las mujeres mayores y las tabletas del Plan Ibirapitá: Hacia la construcción y apropiación de información inclusiva. Terceras Jornadas de investigación de la FIC. Montevideo: FIC

Sabelli, M. (2021). Los estudios de usuarios en Uruguay: una perspectiva de las comunidades investigadas (1992-2014). En Juan José Calva González (Coord.). *Usuarios, archivos y bibliotecas: servicios, teoría y práctica* (pp.263-286). México: UNAM. IIBI

Sabelli, M. (2023 in press). Las mujeres mayores y la información local inclusiva e integradora: un desarrollo posible para *tablets* Ibirapitá. Montevideo: CSIC, Udelar

Sabelli, M.; Fernandez, J.E. & Pérez Giffoni, M.C. (1999). *El decidor en ciencia y tecnología como usuario de información estadística y/o indicadores: contribución para la elaboración de indicadores de Ciencia y Tecnología en Uruguay* [The decision maker in science and technology as a user of statistical information and / or indicators: contribution to the elaboration of indicators of Science and Technology in Uruguay].Montevideo: Ediciones de la Banda Oriental

Sabelli, M., Fernández, J.E. & Pérez Giffoni, M. C.(2010). Necesidades y uso de información para la toma de decisiones en política científica y tecnológica: contribución a la elaboración de indicadores en el Uruguay desde la Ciencia de la Informción. En M.C. Pérez Giffoni & M. Sabelli. *Los estudios de usuarios de información : construcción de unalínea de investigación y docencia en Uruguay*(pp.159-271). Montevideo: Escuela Universitaria de Bibliotecología y Ciencias Afines de la Universidad de la República de Uruguay

Sabelli, M. & Pérez, M. (2001). La información para el productor lechero y su familia: una experiencia de formación y promoción en el Departamento de San José. *Informatio.Revista Del Instituto De Información De La Facultad De Información Y Comunicación*, 5/6, 31-47. Retrieved from https://informatio.fic.edu.uy/index.php/informatio/article/view/63

Sabelli, M. & M. C. Pérez Giffoni (2010a). Usuarios de información en el campo de las ciencias sociales: la Red IDIN. En M.C. Pérez Giffoni y M. Sabelli. *Los estudios de usuarios de información : construcción de unalínea de investigación y*

docencia en Uruguay. Montevideo: Escuela Universitaria de Bibliotecología y Ciencias Afines de la Universidad de la República de Uruguay.

Sabelli, M. & Pérez Giffoni, M.C. (2010b) Estudio de necesidades, demandas y uso de información de los productores lecheros En M.C Pérez Giffoni y M. Sabelli (Ed), Los estudios de usuarios de información : construcción de una línea de investigación y docencia en Uruguay (pp.129-157). Montevideo: Escuela Universitaria de Bibliotecología y Ciencias Afines de la Universidad de la República de Uruguay.

Sabelli, M. & Rasner, J. comp. (2015). *Estrategias de información y comunicación en salud centradas en adolescentes.* Montevideo: Udelar. Retrieved from
https://www.colibri.udelar.edu.uy/bitstream/123456789/6304/1/sabelli_pdf_liccom.pdf (Archived by WebCite[®] at http://www.webcitation.org/6hyW1qEnW)

Sabelli, M., Rasner, J., González, L., Pérez Giffoni, M.C.; Álvarez Pedrosian, E. & Ruggia, R. (2014). Developing Electronic Information Resources to Promote Social Inclusion of Vulnerable Communities in Uruguay**.** In Nasser AL-Suqri,M., Lillard, L.L. &AL-Saleem, E. (Eds.). *Information Access and Library User Needs in Developing Countries* (pp. 94-109). Hershey PA: Information Science Reference.

Sabelli, M., Rasner, J., Pérez Giffoni, M.C. & Álvarez Pedrosian, E. (2013). The information and Communication Strategies Focused on young people and adolescents within the field of Public Health. In M.M. Cruz-Cunha, I. M. Miranda and P. Gonçalves, (Eds.), *Handbook of Research on ICT's for Healthcare and Social Services: Development and Applications*. (pp.247-267). Hershey, PA: IGI Global.

Sabelli, M. & Rodríguez Lopater, V. (2012). *La información y las jóvenes en contextos desfavorables: construyendo puentes para la inclusión social desde la investigación.* Montevideo: Udelar. Retrieved from https://www.colibri.udelar.edu.uy/bitstream/123456789/6302/1/EUBCA-01_Sabelli_2012-12-10-webO.pdf (Archived by WebCite[®] at http://www.webcitation.org/6hyVUV5Xh)

Sabelli, M., Rodríguez Lopater, V., Bercovich, I.&, Szafran Maiche, P. (2012). Las brechas informativas y digitales de las mujeres jóvenes y adolescentes en situación vulnerable. En *Programa Integral Metropolitano. Laboratorio barrial de experiencias* (pp 33-53). Montevideo: SCEAM

Savolainen, R. (1995). Everyday life information seeking: approaching information seeking in the context of "way of life". *Library & Information Science Research,* 17(3), 259-294. Retrieved from http://dx.doi.org/10.1016/0740-8188(95)90048-9

Savolainen, R. (1999). The role of the Internet in information seeking in context. *Information Processing &Management*, 35(6), 765-782.

Savolainen, R. (2002). Network competence and information seeking on the Internet: from definitions towards a social cognitive model. *Journal of Documentation*, 58, 211-226.

Savolainen, R. (2004). Enthusiastic, realistic and critical: discourses of Internet use in the context of everyday life information seeking. *Information Research***,** 10(1). Retrieved from http://InformationR.net/ir/10-1/paper198.html (Archived by WebCite® at http://www.webcitation.org/6CK8HrrwL)

Savolainen, R. (2005). Everyday life information seeking. In Fisher, K. E., Erdelez, S. & McKechnie, L. (Eds.). *Theories of information behaviour*, (pp.143-148). Medford, NY: Information Today.

Savolainen, R. (2008a). *Everyday information practices: a social phenomenological perspective*. Lanham, MD: Scarecrow Press.

Savolainen, R. (2008b). Source preferences in the context of seeking problem-specific information. *Information Processing and Management*, 44 (1), 274-293

Streatfield, D.R. ,Pritchard, J.H.& Wilson, T. D. (1981). Assessment of an illuminatie evaluation programme for information services. *Aslib proceedings* 33(2): 67-70

Veinot, T. C. & Williams, K. (2012). Following the "community" thread from sociology to information behavior and informatics: Uncovering theoretical continuities and research opportunities. *Journal of the American Society for Information Science and Technology*, 63(5), 847-864.

Vorrink, S.N.W., Antonietti, A.M., Kort, H.S.M. et al (2017). Technology use by older adults in the Netherlands and its associations with demographics and health outcomes, *Assistive Technology 29*(4), 188-196

Vroman, K. G., Arthanat, S. & Lysack, C. (2015). "Who over 65 is online?" Older adults' dispositions toward information communication technology. *Computers in Human Behavior, 43*, 156-166.

Walker, C. (2012). The information world of parents: a study of the use and understanding of information by parents of young children. *Library Trends*, *60*(3), 546-568.

Wilson, T. D.(1979). Information uses in social services departments. *Ci. Inf*, Rio de Janeiro 8(2):101-112

Wilson,T.D. (1997a). Information behaviour: an inter-disciplinary perspective. In P.Vakkari, R. Savolainen & B. Dervin eds. *Information seeking in context.* (pp. pp.39-50). London: Taylor Graham.

Wilson,T.D. (1997b). Trends in…a critical review. Information behavior: an interdisciplinary perspective. *Information Processing & Management*, 33(4), 551-572

Wilson, T. D. (1999a). Exploring models of information behaviour: the 'uncertainty'project. *Information Processing & Management*, 35(6), 839-849.

Wilson, T. D. (1999b). Models in information behaviour research. *Journal of documentation*, 55(3), 249-270.

Wilson, T. D. (1981). On user studies and information needs. *Journal of documentation,* 37(1), 3-15.

Wilson,T.D. (1984). The cognitive approach to information-seeking behaviour and information use. *Social Science Information Studies*, 4, 197-204

Wilson, T. D. (2006a). *Information-seeking behaviour and the digital information world. The* Indexer, 25(1), 28-31.

Wilson, T. D. (2006b). Revisiting user studies and information needs. *Journal of documentation*, 62(6), 680-684.

Williamson, K. (1997). The information needs and information-seeking behaviour of older adults: An Australian study. In P. Vakkari, R. Savolainen,& B. Dervin (Eds.), *Information seeking in context: Proceedings of aninternational conference on research in information needs, seeking, and usein different contexts, Tampere, Finland, 1996* (pp. 337-350). Los Angeles,CA: Taylor Graham.

Williamson, K. & Asla, T. (2009). Information behaviour of people in the fourth age: implications for the conceptualizacion of information literacy. *Library and InformationScienceResearch*, *31*(2), 76-83

Williamson, K., Bow, A., & Wale, K.. (1996). Older people, new technology and public libraries. In *Reading the future, Proceedings of the Australian Library and Information Association Biennial Conference*(pp.161-170). Canberra, Australia: ALIA.

Williamson, K., Bow, A. & Wale, K. (1997). Older people and the Internet. *Link-up,* March, 9-12.

Williamson, K., & Roberts, J. (2010). Developing and sustaining a sense of place: The role of social information. *Library & Information Science Research*, 32(4), 281-287

Williamson, K. & Stayner, R.(1980). Information and library needs of the aged. *Australian Library Journal, 29(4),* 188- 195.

Wright, P. (2014). Digital tablet issues for older adults. *Gerontechnology*, *13*(2), 306. http://dx.doi.org/10.4017/gt.2014.13.02.169.00

Talja, S.& Hartel, J. (2007). Revisiting the user-centred turn in information science research: an intellectual history perspective.*Information Research*, *12*(4) paper colis04. Retrieved November 22, 2017 from http://InformationR.net/ir/12-4/colis/colis04.html

Talja, S. & Nyce, J.M. (2015). The problem with problematic situations: Differences between practices, tasks, and situations as units of analysis. *Library & Information Science Research*, *37*: 61-67

Talja, S.; Tuominen, K. & Savolainen, R. (2005). "Isms" in information science: constructivism, collectivism and constructionism*. Journal of Documentation*, 61(1), 79-101.

Tuominen, K.; Talja, S. & Savolainen, R. (2005). In K. E. Fisher; S. Erdelez & L. Mckehnie (Eds.), *Theories of information behavior* (pp.228-233). Medford, New Jersey: ASIS&T

Yu, L. (2011). Toward a reconceptualization of the 'information worlds of individuals'. *Journal of Librarianship and Information Science, 44*(1), 3-18

ANNEX

Table 1: Research Project 1993-2002

Research project	Community of users	Territorial scope	Research team	Date
ACADEMIC AND SCIENTIFIC COMMUNITIES				
Project Users in Social Sciences of the IDIN Network Institution: CIESU	IDIN Social Science Researchers	International Fiveregions: Asia and the Pacific, Africa, Latin America, Europe, Arab Countries	Library and Information Science Methodology advisor	1992-1993
Project Use of Electronic Information by Udelar's Academics Institution: EUBCA	UdelaR academics	National Montevideo	Library and Information Science Methodology advisor	2000-2002
COMMUNITIES OF POLITICIANS, ADMINISTRATORS AND PLANNERS				
Project Informed to decide: the needs and use of information in the environment of Science and Technology development. Institution: CIESU	S&T decision makers	National	Library and Information Science S&T advisor Methodology advisor	1996
COMMUNITIES OF INDUSTRIAL WORKERS				
Project Study on needs, use and production of information of workers in the metallurgical sector and related branches (UNTMRA),	Metalworkers	National Montevideo	Library and Information Science Methodology advisor	1994-1996
COMMUNITIES OF SMALL RURAL FAMILY FARMERS				

| Project Study of dairy producers' needs, demands and use of information | Small dairy producers (dairy farmers) | National Interior–rural area | Library and Information Science Sociology | 1996-1999 |

Source: ownelaboration

Table 2: Research Project 2008-2023

Research project	Community of users	Territorial scope	Research team	Date
Project Towards building information services for the community: study of access and use of information by women from unfavourable contexts (Zone 9 of Montevideo) *Project Women and inclusive information* Institution: EUBCA, Udelar	Women Young and Adolescents living in disadvantaged contexts	Zone 9, Montevideo (neighborhoods Flor de Maroñas, Jardines del Hipódromo, Villa García)	Library and Information Science teachers and researchers and Sociologist	2008-2010
Project Information and Communication Strategies Focused on young people and adolescents within the field of Public Health: Analysis and Proposals (RAP-ASSE.[Level One Attention Network]-*ASSE* [State Health Services Administration] Montevideo, Zone 9), *Project Adolescent and Health Services* Institution:	Teenagers the so called *"Ni Ni"* (young people and teenagers who neither study nor work, living in disadvantaged contexts	Zone 9, Montevideo (neighborhoods Flor de Maroñas, Jardines del Hipódromo, Villa García)	GIISUR Group - *Research group on information and communication for social inclusion and integration* Library and Information Science researchers Communication Researchers Sociologist Undergraduate students and their	2010-2012

			tutors of School of Engineering's Institute of Computing	
Project Information and Communication Strategies Focused on young people and adolescents within the field of Public Health: Analysis and Proposals (RAP-ASSE.[Level One Attention Network]- *ASSE* **[State Health Services Administration] (RAP-ASSE, Paysandú, 2014-2015).**	Teenagers the so called *"Ni Ni"* (young people and teenagers who neither study nor work, living in disadvantaged contexts	Paysandú	GIISUR Group - *Research group on information and communication for social inclusion and integration* Library and Information Science researchers Communication Researchers Sociologist Undergraduate students and their tutors of School of Engineering's Institute of Computing	2014-2015
Project Perspective of old age and gender in disadvantaged environments : towards inclusive strategies of information and communication, The Ibirapita Plan and the Attention System *InfoCoMayores Project* Institution: Information Institute, at the Faculty of Information and Communication-FIC, Udelar,Uruguay	Low-income retired woman of the Ibirapitá Plan with their tablets	Department of Paysandú (cities of Paysandú and Quebracho) and the Department of Rocha (cities of Rocha and La Paloma)	Information science researchers, sociologists, communication scientists and computer engineers	April 2017-April 2019

Project Inclusive and integrative information for families of children and adolescents with Autism Spectrum Disorder (ASD): access, use, appropriation, and mediators. InFam-ADS *InFam-ADS Project* Institution: Information and Society Department, Information Institute, at the Faculty of Information and Communication – FIC and Pediatrics Chair C of the School of Medicine. University of Republic, Uruguay – Udelar	Family members and professional and social mediators of children and adolescents with Autism Spectrum Disorder (ASD)	Montevideo, Salto and Paysandú Departements	Information science researchers, sociologist, Pediatricians specialists in Autism Spectrum Disorder (ASD)	2020-2023

Source: own elaboration