



# **Addiction and Lifestyles in Contemporary Europe: Reframing Addictions Project (ALICE RAP)**

## **Final Evaluation Report**

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### **Deliverable 21.1, Work Package 21**

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Participant organizations in ALICE RAP can be seen at <http://www.alicerap.eu/about-alicerap/partner-institutions.html>.

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## Abstract

At the onset of the ALICE RAP project, the following objectives, description of work, and main tasks were agreed for Work Package 21:

1. To evaluate the overall functioning of the collaborative research project, using a state-of-art systems model of partnership functioning.
2. To document the interactions and linkages between project inputs, throughputs and outputs as the project unfolds over five years.
3. To facilitate structured discussions involving all partners, to be held at the end of every project meeting, to identify ways to optimise partnership functioning.
4. To produce a report about what is learned about optimising partnership functioning, to benefit future European research collaborations.

The frameworks for the evaluation are the Quality Criteria of Transdisciplinary Research (QCTR) and the Bergen Model of Collaborative Functioning (BMCF), an established systems model with five elements:

- (1) Inputs including projects aims, partner financial, intellectual and technical resources;
- (2) Production processes (work directly related to meeting objectives) including positive and negative interaction amongst inputs, and positive and negative aspects of leadership, communication, and roles/structure;
- (3) Maintenance processes (work directly related to keeping the partnership functioning effectively);
- (4) Outputs (e.g., delivery on objectives) including additive, synergistic and antagonistic (negative) outputs, and
- (5) Feedback processes whereby outputs generated underway affect continuing input and throughput processes.

These are the main Work package 21 tasks as agreed at the onset of the ALICE RAP Project; subsequent modifications are noted [in brackets].

Task 1: During the first three months of the project, at the half way point and again near the end of the project, all willing WP leaders and key administrative personnel will participate in 15-25 minute recorded, structured telephone interviews. The interview guide will include brief questions related to all five evaluation elements, with greater detail given to the element(s) having the most relevance at the various phases of the project. In others words, element 1 will be emphasised at the first round of interviews and elements 4 and 5 will be emphasised during the last round of interviews.

[The planned first round of telephone interviews was completed, while the 2<sup>nd</sup> and 3<sup>rd</sup> rounds were substituted by self-report questionnaires completed either at partner meetings or online. This change was made based on preferences expressed by the Work Package Leaders, and agreed to by ALICE RAP leadership and the European Commission's Project Officer.]

Task 2: Following each round of interviews, selected recorded material will be transcribed and analysed and report will be generated and circulated to all partners prior to the next project meeting. The reports will be structured to fully protect the confidentiality of interviewees. The three reports will be synthesised into a final report following the third round of interviews. The reports will be used by the WP leaders to illuminate ways to improve the functioning of the project.

[This task was completed with data generated by questionnaires, in addition to telephone interview data.]

Task 3: At the conclusion of each project meeting, WP 21 will facilitate a structured discussion (recorded, guided by a structured interview guide) that will briefly address each of the five elements listed above. However, at each meeting, one of the elements will be intensively in focus, corresponding to the progression of the project. In other words, element 1 will be the focus of the discussion at the first meeting, elements 2 and 3 will be the main focus of the second meeting, elements 4 and five will be the main focus of the third meeting, and so on.

[All the planned project meeting discussions took place, but not all were recorded due to practical limitations. When recording was not feasible, self-report questionnaires were used to gather needed data. The discussions were augmented by online surveys.]

Task 4: After each project meeting, WP 21 will transcribe recordings and produce an analysis and report to be circulated to all partners. The reports will be used by the WP leaders to illuminate ways to improve the functioning of the project.

[Following each project meeting, data analysis and reporting were done as planned, but the data came not only from recordings; qualitative and quantitative data were also used, collected by self-report questionnaire (both paper-and-pencil and online).]

Task 5: As an ongoing task, WP 21 will produce a running analysis using all data as they become available, using the BMCF as the evaluation framework. This will result in a final evaluation report, publication of results in the international peer review literature and presentations at scholarly conferences.

To meet the goals and accomplish the evaluation tasks, a range of qualitative and quantitative methods was used in a participatory/exploratory sequential mixed methods study design. The data sources were evaluations following ALICE RAP Partner meetings, data from several computer-mediated communication sessions at ALICE RAP partner meetings, self-report questionnaire data gathered at partner meetings and via the internet, individual telephone interviews with Work Package and Area leaders, and members of the Media and

Communications Group and the Global Science Group, and project documents. This is a 'dynamic' design including a series of sub-studies, conducted over the entire project period, with each new sub-study's aim and design based on the accumulating knowledge. The entire Area 7 team participated in decisions about the aims and designs of the sub-studies, and all Work Package Leaders had the opportunity to provide input.

The ALICE RAP official list of project participants is the population from which evaluation participants were drawn. The list was modified over the course of the study as some participants left the project and other joined. The current list was used at each stage of the evaluation. In some instances the entire list was used and the sample was the population. In other instances the subset of participants attending a partner meeting and present at the time of evaluation composed the study sample. At yet other times a purposive sample was drawn, as was the case for the collection of telephone interview data. The details of participation are given in the descriptions of the Sub-studies, later in the Methods section.

## Data collection

*Post-meeting evaluations* At the conclusion of each of the annual partners' meetings, a meeting evaluation questionnaire was distributed to all participants in attendance. These data were analysed and fed back to ALICE RAP leadership to assist them in planning the next meeting. As the meeting evaluations had mostly to do with the practical aspects of conducting meetings, the results of these evaluations are not included in this report.

*Computer-mediated Communication (CMC) participatory evaluation* When actors from disparate backgrounds and viewpoints gather to formulate and implement solutions, as in ALICE RAP, achieving effective communication is a special challenge. Computer-mediated communication (CMC) is often helpful in this regard, and it was used at some partner meetings to foster general discussions. A CMC innovation addressed by this evaluation process was to use scientific methods to analyse, interpret and feedback CMC data and results to ALICE RAP management.

*Interviews* Following the ALICE RAP meeting in Barcelona in May, 2011, telephone interviews were undertaken with Work Package leaders and the Chairs of the Media and Communications Group and the Global Science Group. The interview guide is in Appendix A.

*Self-report questionnaires* Self-report questionnaires were used in several Sub-studies, distributed either during partner meetings, or via the internet.

*Documents* All official ALICE RAP documents were available for analysis, including the original application and the evaluation that led to the funding of the project. These were used, but were data sources of relatively minor importance.

## **Evaluation Sub-studies aims and main findings**

### *Mission and Values Sub-study*

This sub-study, undertaken early in the project's development, aimed to initiate a wide-ranging partners' discussion on how the ALICE RAP partnership should function, ways to make it work smoothly and efficiently, the project's mission, and the degree to which there is a diversity of core values among the ALICE RAP scientists. The issue of partnership functioning was a focus in all the Sub-studies, while the issues of mission and values were the particular foci of this Sub-study. The main result with regard to management practices, rather expectedly, was that the participants wish for a leadership style that balances firmness and clear direction on the one hand, with openness and a consultative style on the other hand. Perhaps less expected was the degree to which participants focused on challenges related to diversity in the ALICE RAP research team. A warning was sounded about possible diversity-related dominance problems of two types: dominance by one or several disciplines over the others, and dominance of native English language speakers over the others. A finding of particular significance that emerged from the CMC has to do with values. It might have been the case that as scientists, the participants would have focussed on the eternal debate about value-laden versus value-free science. However, the widely held position was that science is value-laden, that values should therefore be illuminated, and that ALICE RAP should make an effort to develop shared values. Considerable attention was also paid to societal values regarding the nature of addiction, and the need to reframe the problem of addiction so as to reduce stigmatisation and marginalisation of people with addictions. However, it is open to question which values actually predominate in ALICE RAP, since the CMC is not the right methodology to study values, attitudes and predispositions. Further study of values, attitudes and predispositions held by ALICE RAP scientists could be useful in understanding the unfolding of the project's science.

### *Leadership Sub-study*

A telephone interview survey was used to gain insight about ALICE RAP's leadership strategy, and its coordination and communication methods. The results of this Sub-study were discussed by the ALICE RAP leadership team, and it was agreed that ALICE RAP should develop Vision and Mission statements. There ensued a round of consultations, leading to the adoption of these statements, which are featured on the home page of the ALICE RAP web site:

*Vision Statement* -- Promote well-being through a synthesis of knowledge to redesign European policy and practice to better address the challenges posed by substance use and addictive behaviours.

*Mission Statement* --

Advance synergy among sciences that address substance use and addictive behaviours, through a five-year programme of European trans-disciplinary research.

### *Science and Policy Dialogue Sub-study*

The aim of this Sub-study was to address a key goal stated in the ALICE RAP Description of Work: to include "clear and targeted dissemination and valorisation strategies, addressing and involving not only scientific audiences, but also policy-makers, other key actors and stakeholders..." The starting point for the CMC session on policy-science dialogue was the

assumption that ALICE RAP has to engage stakeholders, as that is an essential aspect of TDR. The issue, then, is how to involve stakeholders. Scenarios were provided to illustrate possible levels of involvement, ranging from simply engaging stakeholders in dialogue, to acting together and taking responsibility together. The findings suggested a differentiated strategy for stakeholder involvement, tailored to particular aspects of addiction, to country or community levels of interest, and to the different stages of the project as it progresses. This could be developed as an element in ALICE RAP's Communication Strategy, in collaboration with Areas and Work Packages. The essence of a Stakeholder Communication Strategy with this tone would be its emphasis on 'communication with' stakeholders, rather than 'communication to' stakeholders.

#### *Research Orientation Sub-study*

This sub-study was undertaken to provide ALICE RAP with insight about its scientists' orientations to research collaboration after two years of the project, and again at the conclusion of the project. Those in ALICE RAP with the greatest expressed proclivity for inter/transdisciplinary research are older men in the biomedical sciences and younger women in the social sciences. Yet, as Tables 6-8 show, respondents in this study generally expressed strong proclivity for inter/transdisciplinary research, regardless of scientific background, sex and age. This quite likely is due more to a selection effect than to an adaptation effect. The ALICE RAP leadership intended to recruit scientists with the needed scientific expertise and with proclivity for transdisciplinarity. While the experience in ALICE RAP between 2013 and 2015 may have affected scientists' attitudes towards transdisciplinary working both favourably and unfavourably, we conclude that at near the mid-point of ALICE RAP (2013), the partners' orientations to collaboration was already consistent with the transdisciplinary Mission of the Project.

The 2013 and the 2015 rounds of data collection yielded data that should be compared with substantial caution, since the sample frames (partners in attendance at the 2013 Barcelona and the 2015 Lisbon meetings) were different, even if drawn from approximately the same population (participants listed on ALICE RAP lists). Notwithstanding this caution, we conclude that amongst partners attending the two meetings and participating in the Research Orientation Scale data collection, the mean Research Orientation Scale score was similar, at about 28 in 2013 and in 2015. Experience in ALICE RAP seems to have neither decreased nor increased partners' proclivity for transdisciplinary research collaboration.

#### *Collaboration Sub-study*

The aim of this Sub-study was to map collaborative contacts within and between ALICE RAP Areas and Work Packages. ALICE RAP is conceived as a transdisciplinary research (TDR) project. Great effort has been made to organise the project in ways that encourage the partners to cross administrative boundaries (Areas, Work Packages). Substantial parts of partner meetings have been devoted to discussions and consultations having the aim to stimulate the TDR atmosphere. The data suggest that a great deal of inter-Area and inter-Work Package collaboration happened in the period before data collection. Yet, the pattern was of substantial heterogeneity, with Area 3 seeming to be a beehive of inter-Area collaboration, and Areas 2 and 5 beehives of intra-Area collaboration. In their interpretations of the instructions for completing the survey, there is reason to believe that respondents pondered personal instances of collaboration.



### *The Futures Sub-study*

The Futures Sub-study's aim was to use the Bergen Model of Collaborative Functioning, to document partners' perceptions of ALICE RAP collaborative processes and the degree to which they experienced synergy in the project. Data were collected using the online ALICE RAP Futures Questionnaire in 2014, with repeated data collection using the same questionnaire in 2015. In the measurement of ALICE RAP synergy, the data show consistently that a large majority of respondents perceived the project to have synergistic effects. There were interesting sex differences. Males were more than twice as likely as females to have experienced synergy frequently, but males were far more likely to be critical of the scientific quality of ALICE RAP. There was more moderate evidence for synergy in the other synergy construct – continuity -- as expressed by respondents' intentions to participate in ALICE RAP-related activities after the project is completed. In Futures I, the continuity scale was close to normally distributed. In Futures II, the majority of respondents indicated intentions to participate by endorsing and supporting activities, or playing a modest role. For the more active types of future participation, women were more likely than were men to indicate the possibility of extensive futures participation. This was the case for connecting to networks with like interests, writing research applications, and writing papers. Men, on the other hand, were more likely to intend active participation in more general activities like endorsement and advocacy.

### *Maintaining momentum Sub-study*

This Sub-study focused on the outputs element of the BMCF (Figure 1), aiming to ascertain the degree of synergy regenerated by ALICE RAP (indicated by partners' intentions to keep aspects of the project underway after the EU funding period). Two main themes arose, research and networks. Five specific ideas were identified related to possible future social science research, seemingly with an emphasis on descriptive aspects (not intervention research). The five topics shown are listed in arbitrary order. The second research stream that received attention was related to intervention for policy enhancement, for which three highly interrelated topics were identified – again, these are listed in Figure 1 in arbitrary order. Together, eight social science research topics received attention, while no bio-medical topics were suggested. The other emergent theme was networks, loosely divided into ideas related to less and more formal networks. Five network ideas received attention, with various purposes: the gathering of vested interests; advocacy; building transdisciplinary science capacity across addiction arenas and micro to macro levels of systems; research. The findings suggest at least some degree of interest in continued ALICE RAP work. Interestingly, no participant suggested just letting ALICE RAP fade away.

## Chapter 1 Introduction

At the onset of the ALICE RAP project, the following objectives, description of work, and main tasks were agreed for Work Package 21:

### Objectives

4. To evaluate the overall functioning of the collaborative research project, using a state-of-art systems model of partnership functioning.
  5. To document the interactions and linkages between project inputs, throughputs and outputs as the project unfolds over five years.
  6. To facilitate structured discussions involving all partners, to be held at the end of every project meeting, to identify ways to optimise partnership functioning.
- 
4. To produce a report about what is learned about optimising partnership functioning, to benefit future European research collaborations.

### Description of the Work

The frameworks for the evaluation are the Quality Criteria of Transdisciplinary Research (QCTR) and the Bergen Model of Collaborative Functioning (BMCF), an established systems model with five elements:

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- (5) Feedback processes whereby outputs generated underway affect continuing input and throughput processes.

Critically, the BMCF 'normalises' the occurrence of problems in partnership functioning and

thus legitimises the illumination of such problems early enough for corrective action to be taken. As an ongoing part of the evaluation, partners learn to discuss functioning with candour, and learn the skill of open, critical reflection, leading to positive changes in functioning.

These evaluation processes are continuous and taken up right at the start of the project, providing a working atmosphere of continuous quality improvement. Work Package 21 is thus simultaneously a management activity that improves and optimises the functioning of the ALICE RAP research collaboration, and a research activity to contribute to the literature on optimising the functioning of research partnerships.

### **Main tasks**

These are the main Work package 21 tasks as agreed at the onset of the ALICE RAP Project; subsequent modifications are noted [in brackets].

Task 1: During the first three months of the project, at the half way point and again near the end of the project, all willing WP leaders and key administrative personnel will participate in 15-25 minute recorded, structured telephone interviews. The interview guide will include brief questions related to all five evaluation elements, with greater detail given to the element(s) having the most relevance at the various phases of the project. In other words, element 1 will be emphasised at the first round of interviews and elements 4 and 5 will be emphasised during the last round of interviews.

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Task 2: Following each round of interviews, selected recorded material will be transcribed and analysed and report will be generated and circulated to all partners prior to the next project meeting. The reports will be structured to fully protect the confidentiality of interviewees. The three reports will be synthesised into a final report following the third round of interviews. The reports will be used by the WP leaders to illuminate ways to improve the functioning of the project.

[This task was completed with data generated by questionnaires, in addition to telephone interview data.]

Task 3: At the conclusion of each project meeting, WP 21 will facilitate a structured

discussion (recorded, guided by a structured interview guide) that will briefly address each of the five elements listed above. However, at each meeting, one of the elements will be intensively in focus, corresponding to the progression of the project. In other words, element 1 will be the focus of the discussion at the first meeting, elements 2 and 3 will be the main focus of the second meeting, elements 4 and five will be the main focus of the third meeting, and so on.

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Task 4: After each project meeting, WP 21 will transcribe recordings and produce an analysis and report to be circulated to all partners. The reports will be used by the WP leaders to illuminate ways to improve the functioning of the project.

[Following each project meeting, data analysis and reporting were done as planned, but the data came not only from recordings; qualitative and quantitative data were also used, collected by self-report questionnaire (both paper-and-pencil and online).]

Task 5: As an ongoing task, WP 21 will produce a running analysis using all data as they become available, using the BMCF as the evaluation framework. This will result in a final evaluation report, publication of results in the international peer review literature and presentations at scholarly conferences.

### **Background for Work Package 21 and the ALICE RAP participative evaluation**

This section describes how a new type of formative and process evaluation was used to stimulate interdisciplinary interaction in ALICE RAP, in which transdisciplinary collaboration was a main aim. This evaluation approach is postulated to be relevant to all large-scale social research projects involving research partners from several countries, several research institutions and several disciplines. The need for such research in Europe is widely evident, to provide a knowledge base for policy-making addressing complex social problems that have a pan-European character. A prime example of a policy arena that calls for large-scale transdisciplinary research is public policy on the place of addictive substances in social life (Sussman et al., 2004; Fuqua et al., 2004).

Disciplines may contribute research to policy processes in an un-coordinated, parallel fashion (multidisciplinary), in a coordinated yet still disciplinary-specific way (interdisciplinary), or through cross-fertilisation and hybridisation (transdisciplinary). The distinction between inter-, multi- and transdisciplinary research (TDR) is the contribution of Rosenfield (1992),

who held the position that for science to contribute to improved policy and practice, “creative collaboration” is called for, leading to knowledge that could otherwise not be produced.

TDR is a process. The degree to which a research project achieves transdisciplinarity can only be determined as the project unfolds and produces knowledge. What is of special interest is a project that has the explicit aim to achieve transdisciplinarity, and ALICE RAP is such a research project. Because of the power of disciplinary thinking and habits, special efforts were needed from the first day of ALICE RAP, to inject and reinforce TDR culture. This required that ALICE RAP partners took time to become familiar with one another’s terms and language, ways of thinking about a problem and about various research approaches to the problem. This, in turn, required structured time for communication, for listening, and for genuine effort to understand others’ points of view. The epitome of TDR success is the ability to not just understand, but to occasionally take others’ points of view, while not abandoning one’s own (even if one’s own viewpoint may be altered by the experience).

### **Evaluation as a research management tool**

Formative evaluation is often used at the start of a research project to help develop interventions and methodology, but it can also be used as a project management tool in TDR (Bergmann et al., 2005). In tune with the participatory nature of TDR, evaluation experts recommend an ‘action’ research approach to formative evaluation, in which the collaborators plan, do, learn and plan again, in a learning cycle that is a way of working throughout the course of a project.

The key features of action research are that:

- the project participants undertake it themselves (perhaps with some help from evaluation professionals);
- it is a style of working integral to the project’s professional activities;
- it calls for time and dedication to critical reflection on the project’s activities and processes that may lead to improvements in the functioning of the project.

These features characterise ALICE RAP’s approach to evaluation, informed by a systems framework for the study of complex collaborations called the Bergen Model of Collaborative Functioning -- BMCF (Corbin & Mittelmark, 2008; Corbin, Mittelmark and Lie, 2012, 2012, 2015; Corwin, Corbin and Mittelmark, 2012) and using TDR quality criteria developed from a social ecology perspective (Bergmann et al., 2005; Lang, et al., 2012).

The ALICE RAP evaluation aimed to help ALICE RAP function well as a collaborative activity

and achieve transdisciplinarity. The evaluation was undertaken in concert with many other project management activities and organisationally, the evaluation unit (Work package 21) was part of project management in Area 7. Before describing the evaluation methodology ALICE RAP developed to stimulate its own transdisciplinarity, the nature of TDR is considered, with special attention to the challenges of accomplishing transdisciplinarity. Why is it wise, even essential, to devote energy and resources to formative evaluation that stimulates transdisciplinarity? That question is addressed next.

### **The challenges of conducting TDR**

There is no agreement on a definition of TDR, but there is general consensus about essential characteristics that differentiate it from other forms of research collaboration. TDR addresses relevant social issues and includes the participation of non-academic actors who wish to address social issues. It aims to integrate disciplinary thinking and concepts to produce understanding that would not otherwise emerge. Demand for TDR, which has long been evident, is growing ever-stronger (Klein, 2004; Stokols et al., 2010; Pohl, 2008).

Despite enthusiasm for TDR, there are many potential roadblocks to its successful implementation and execution (Stokols et al., 2008; Wickson, Carew & Russell, 2006). Stokols et al. (2008) reviewed literature on collaboration effectiveness from the fields of social psychology and organisational behaviour, cyber infrastructure, community psychology and evaluation of transdisciplinary research, and synthesised the findings in a typology with six elements that affect the quality and impact of TDR. These elements are:

- Intrapersonal factors (e.g. members' attitudes towards collaboration, leadership style),
- Interpersonal factors (e.g. members' familiarity with one another and diversity of perspectives),
- Organisational factors (e.g. organisational incentives for collaboration and organisational working climate),
- Technological factors (e.g. infrastructure to support collaboration and members' ability and willingness to use it),
- Social and political factors (e.g. policies that facilitate collaboration), and
- Physical and environmental factors (e.g. spatial proximity and facilities to facilitate collaboration).

A main point is that the more complex a TDR project, the more complex are the contextual factors that influence its effectiveness. Stokols et al. (2008) conclude that investments in such initiatives should match the complexity of a TDR project's structure and goals.

### **ALICE RAP as TDR**

ALICE RAP can be defined as a 'goal-directed network', a formal mechanism to achieve multi-organisational outcomes (especially in the public and non-profit sectors) where collective action is often required for problem solving (Agranoff & McGuire, 2003; Provan & Kenis, 2008). Goal-directed networks are set up with a specific purpose, either by those who participate in the network or through mandate, and evolve largely through conscious efforts to enhance coordination.

ALICE RAP addressed the challenges posed by addictions through a balanced combination of research work and complementary activities. Traditional scientific activities were complemented by stock-taking, foresight exercises, and dissemination and management activities. ALICE RAP had six main scientific objectives each collected into one of six main areas of work. The objectives are to:

- 1) Describe the ownership of addictions through a historical study of addiction over the ages, an analysis of public and private stakeholder views and, through image analyses, of professional and citizenship views;
- 2) Study how addictions are classified and defined, followed by estimates of their health, social and economic impact;
- 3) Investigate determinants of addiction through a coordinated and cohesive social, economic and biological analysis of initiation, transition into problem use and transition into and out of dependence;
- 4) Analyse the business of addiction through studies of revenues, profits and participants in legal and illegal trade, the impact of suppliers on addictive substance use and behaviours, and analyses of webs of influence on policy responses;
- 5) Study addictions governance by describing the views and forces that determine the ways societies steer themselves and by stock-taking of present governance practices to old and emerging addictions; and
- 6) Analyse youth as customers by considering the impacts of new technologies on promoting and mitigating use, by studying the interrelations of culture and biology, and by determining features that promote resilience and nudge young people to

reduce problematic use.

The more than 100 ALICE RAP partners have backgrounds in a range of disciplines and specialties, among others: anthropology, business administration, chemistry, criminology, demographics, dentistry, economics, education/pedagogy, electronics and computer science, e-logistics, epidemiology, forensic toxicology, health care economics, health care management, health promotion, history, human sciences, information technology, journalism, management sciences, marketing, medicine (psychiatry, general medicine), nursing sciences, pharmacology, policy analysis, political science, psychology (cognitive, developmental, social, clinical, neuropsychology, experimental), public health, social studies, social work, sociology, supply chain management and toxicology. In addition, ALICE RAP has non-academic partners affiliated with public administration, international non-governmental organisations, healthcare providers and health communications specialists. Even without the overview already provided about the challenges of doing TDR, it takes little imagination to appreciate the challenges of achieving transdisciplinarity in such a scholarly menagerie.

### **Participatory Evaluation of ALICE RAP**

The structure for the evaluation uses the elements of two frameworks:

- Bergen Model of Collaborative Functioning -- BMCF (Corbin & Mittelmark, 2008; Corbin, Mittelmark and Lie, 2012, 2013, 2015; Corwin, Corbin and Mittelmark, 2012).
- TDR quality criteria developed from a social ecology perspective (Bergmann et al., 2005; Lang, et al., 2012).

The BMCF shown in Figure 1 is derived from empirical findings of several earlier studies. These include a global health promotion partnership (Corbin and Mittelmark, 2007), a partnership for alcohol control (Endresen, 2007), a partnership for enhanced patient nutrition (Corwin, 2012), an NGO–donor partnership in Kazakhstan (Dosbayeva, 2010), a health management information system project in Kenya (Kamau, 2011), and the evaluation of the functioning of North-South partnership for health promotion (Corbin, Mittelmark and Lie, 2012, 2013, 2015).

The BMCF is a systems model with input, throughput, output and feedback components (Corbin and Mittelmark, 2007, 2008). The BMCF specifies these inputs to a partnership as: its mission, its partner resources and its financial resources. The BMCF specifies throughputs as the collaborative *context*. Inputs enter this context and interact positively or negatively as participants work on the maintenance (administrative tasks) and production (relating to the collaborative mission) activities of the partnership.



The collaboration context is influenced by the interaction of four elements: the inputs, leadership, roles and procedures, and communication. These interact both positively and negatively. The outputs may well be a combination of additive outputs (would have happened anyway), synergy and/or the opposite, antagonism, in which the costs of partnership are perceived to outweigh the benefits (Corbin and Mittelmark, 2008).

The BMCF is a general systems model that has proven to have utility in the analysis of a very wide range of partnership types, as indicated above. However, it has not been used heretofore as a framework for the evaluation of TDR, and the ALICE RAP evaluation requires further specification for TDR than the BMCF can provide. To meet the need for specification, we use a process evaluation framework developed by the Evaluation Network for Transdisciplinary Research, depicted in Figure 2 (Bergmann et al., 2005; Lang, et al., 2012). Their Quality Criteria of Transdisciplinary Research (QCTR) framework for evaluation contains quality criteria for the formative evaluation of TDR projects. The quality criteria were arrived at through a discursive analysis of six transdisciplinary projects (see Bergmann, et al., 2005, for details).

The explicit framework for the evaluation was the BMCF, while the QCTR framework was used to help operationalise quality issues taken up in the evaluation process.

## References

- Agranoff, R., & McGuire, M. (2004). Collaborative public management: New strategies for local governments. Georgetown University Press.
- Bergmann, M., Brohmann, B., Hoffmann, E., Loibl, M. C., Rehaag, R., Schramm, E., & Voß, J. P. (2005). Quality criteria of transdisciplinary research. A guide for the formative evaluation of research projects. ISOE-Studientexte, (13).
- Corbin, J. H. and Mittelmark, M.B. (2007). The Global Programme on Health Promotion Effectiveness: A case study of global partnership functioning. In McQueen, D.V. and Jones, CM (eds.) Global Perspectives on Health Promotion Effectiveness, Berlin:Springer, 41-50.
- Corbin, J. H., & Mittelmark, M. B. (2008). Partnership lessons from the Global Programme for Health Promotion Effectiveness: a case study. *Health Promotion International*, 23(4), 365-371.
- Corbin, J. H., Mittelmark, M. B., & Lie, G. T. (2012). Scaling-up and rooting-down: a case study of North-South partnerships for health from Tanzania. *Global health action*, 5.
- Corbin, J. H., Mittelmark, M. B., & Lie, G. T. (2013). Mapping synergy and antagonism in North–South partnerships for health: a case study of the Tanzanian women's NGO KIWAKKUKI. *Health promotion international*, 28(1), 51-60.
- Corbin, J. H., Mittelmark, M. B., & Lie, G. T. (2015). Grassroots volunteers in context: rewarding and adverse experiences of local women working on HIV and AIDS in Kilimanjaro, Tanzania. *Global health*

promotion, 1757975915569514.

Corwin, L., Corbin, J. H., & Mittelmark, M. B. (2012). Producing synergy in collaborations: A successful hospital innovation. *The Innovation Journal*, 17(1), 2.

Dosbayeva, K. (2010). Donor-NGO collaboration functioning: Case study of Kazakhstani NGO. Academic thesis, University of Bergen, Bergen.

Endresen, E. M. (2007). A Case Study of NGO Collaboration in the Norwegian Alcohol Policy Arena. Academic thesis, University of Bergen, Bergen.

Fuqua, J., Stokols, D., Gress, J., Phillips, K., & Harvey, R. (2004). Transdisciplinary collaboration as a basis for enhancing the science and prevention of substance use and "abuse". *Substance use & misuse*, 39(10-12), 1457-1514.

Kamau, A. N. 2010. Documentation of the Implementation Strategy. A case study for the Kibwezi Community-Based Health Management Information System Project, Kenya, available at <https://bora.uib.no/handle/1956/4276> (accessed December 29, 2011).

Klein, J. T. (2004). Prospects for transdisciplinarity. *Futures*, 36(4), 515-526.

Lang, D. J., Wiek, A., Bergmann, M., Stauffacher, M., Martens, P., Moll, P., ... & Thomas, C. J. (2012). Transdisciplinary research in sustainability science: practice, principles, and challenges. *Sustainability science*, 7(1), 25-43.

Pohl, C. 2008. From science to policy through transdisciplinary research. *Environmental Science and Policy*, 11: 46-53.

Provan, K.; Kenis, P. (2008). Modes of network governance: Structure, management, and effectiveness. *Journal of Public Administration Research and Theory*, 18, 2: 229-252.

Rosenfield, P. L. (1992). The potential of transdisciplinary research for sustaining and extending linkages between the health and social sciences. *Social science & medicine*, 35(11), 1343-1357.

Stokols, D., Hall, K. L., Taylor, B. K., & Moser, R. P. (2008). The science of team science: overview of the field and introduction to the supplement. *American Journal of Preventive Medicine*, 35(2), S77-S89.

Stokols, Daniel., K.L. Hall, R.P. Moser, A. Feng, S. Misra, & B.K. Taylor. 2010. Cross-disciplinary team science initiatives: research, training, and translation. Pp. 471-93 in *The Oxford Handbook of Interdisciplinarity*, edited by Robert Frodeman, Julie Thompson Klein, Carl Mitcham and J. Britt Holbrook. Oxford: Oxford University Press.

Sussman, S., Stacy, A. W., Johnson, C. A., Pentz, M. A., & Robertson, E. (2004). A transdisciplinary focus on drug abuse prevention: an introduction. *Substance use & misuse*, 39(10-12), 1441-1456.

Wickson, F., Carew, A. L., & Russell, A. W. (2006). Transdisciplinary research: characteristics, quandaries and quality. *Futures*, 38(9), 1046-1059.

## Chapter 2 Methods

### Design

A range of qualitative and quantitative methods was used in a participatory/exploratory sequential mixed methods study design (Fetters, Curry and Creswell, 2013). The data sources were evaluations following ALICE RAP Partner meetings, data from several computer-mediated communication sessions at ALICE RAP partner meetings, self-report questionnaire data gathered at partner meetings and via the internet, individual telephone interviews with Work Package and Area leaders, and members of the Media and Communications Group and the Global Science Group, and project documents. This is a 'dynamic' design including a series of sub-studies, conducted over the entire project period, with each new sub-study's aim and design based on the accumulating knowledge. The entire Area 7 team participated in decisions about the aims and designs of the sub-studies, and all Work Package Leaders had the opportunity to provide input.

### Participants

The ALICE RAP official list of project participants is the population from which evaluation participants were drawn. The list was modified over the course of the study as some participants left the project and others joined. The current list was used at each stage of the evaluation. In some instances the entire list was used and the sample was the population. In other instances the subset of participants attending a partner meeting and present at the time of evaluation composed the study sample. At yet other times a purposive sample was drawn, as was the case for the collection of telephone interview data. The details of participation are given in the descriptions of the Sub-studies, later in this methods section.

### Data collection

**Post-meeting evaluations** At the conclusion of each of the annual partners' meetings, a meeting evaluation questionnaire was distributed to all participants in attendance. These data were analysed and fed back to ALICE RAP leadership to assist them in planning the next meeting. As the meeting evaluations had mostly to do with the practical aspects of conducting meetings, the results of these evaluations are not included in this report.

**Computer-mediated Communication (CMC) participatory evaluation** When actors from disparate backgrounds and viewpoints gather to formulate and implement solutions, as in ALICE RAP, achieving effective communication is a special challenge. Computer-mediated

communication (CMC) is often helpful in this regard, and it was used at some partner meetings to foster general discussions. A CMC innovation addressed by this evaluation process was to use scientific methods to analyse, interpret and feedback CMC data and results to ALICE RAP management.

**Interviews** Following the ALICE RAP meeting in Barcelona in May, 2011, telephone interviews were undertaken with Work Package leaders and the Chairs of the Media and Communications Group and the Global Science Group. The interview guide is in Appendix A.

**Self-report questionnaires** Self-report questionnaires were used in several Sub-studies, distributed either during partner meetings, or via the internet.

**Documents** All official ALICE RAP documents were available for analysis, including the original application and the evaluation that led to the funding of the project. These were used, but were data sources of relatively minor importance.

### **Overview of the Sub-studies**

Table 1 lists major ALICE RAP activities and the evaluation Sub-studies. The Table's Comments column illustrates that these were inextricably intertwined, with Work Package 21 contributing to TDR enhancement as part of ALICE RAP activities, and Work package 21 conducting Sub-studies during and in the intervals between ALICE RAP activities. In this Methods section, each Sub-study is reported in its chronological order along with Sub-study results. In the Results section of this report, an integrated treatment of all Sub-study results is provided. Presenting study methods and study results together in this methods section is intended to simplify reading of this report.

### **Reference**

Fetters, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving integration in mixed methods designs—principles and practices. *Health Services Research, 48*(6pt2), 2134-2156.

## Chapter 3 Mission and Values Sub-study

### Aim

This sub-study, undertaken early in the project's development, aimed to initiate a wide-ranging partners' discussion on how the ALICE RAP partnership should function, ways to make it work smoothly and efficiently, the project's mission, and the degree to which there is a diversity of core values among the ALICE RAP scientists and non-academic partners and stakeholders. The issue of partnership functioning was a focus in all the Sub-studies, while the issues of mission and values were the particular foci of this Sub-study.

This Sub-study focused on the input element of the BMCF (Figure 1).

### Participants

Three computer-mediated communication (Mittelmark, et al., 2012) sessions were conducted during the first ALICE RAP scientific project meeting (23-27 May, 2011) with 104 of ALICE RAP's 153 scientists participating (51 percent are men, and 60 percent have a doctoral degree). The CMC sessions were conducted at nine simultaneous, randomly composed roundtables, where the participants were gathered.

### Methods

There was one computer per table and all the computers were connected to a single virtual chat room, visible to all participants through TV monitors placed around the room. A chair/coordinator at each table facilitated the discussion, assisted by a reporter who posted the group's comments on the chat room (chairs and reporters were selected based on convenience). Via the monitors, all participants could see the posted information simultaneously and in real time. The tables' discussions were processed, interpreted, and then posted in a consensus building process which involved the participants, the chair and the reporter, in interaction with other roundtables. The tables were numbered and each post was identified by table number, not by individual post contributors.

Each CMC session was of about 30 minute duration and participants received the following statements as stimuli for discussion: (Session 1) "Think back to your best and worst experience in research collaborations. What excellent management practice do you recommend that ALICE RAP adopt? What terrible approach to management must ALICE RAP avoid at all costs?" (Session 2) "What is the ALICE RAP mission?" (Session 3) "Quick overview about how scientific and societal core value differences can be a strength to a collaboration like ALICE RAP followed by a discussion about the degree to which this is a matter of importance to ALICE RAP, and if it is judged to be important, how should it be addressed during the course of the project". The CMC sessions were combinations of brainstorming, logging and networking, and complemented with an integrated content analysis as described next.

A preliminary form of content analysis and data reduction was performed during the CMC sessions themselves, as the groups at the tables decided which of their comments would be posted to the chat room, and how pronouncements (sometimes long-winded) would be condensed into one line to be posted to the chat room. Some censoring occurred, as when a group would not agree that someone's pronouncement should be posted. The raw data (the actual pronouncements) were not recorded and therefore not analysed. The secondary data (the chat room posts) were analysed separately, then a combined analysis was performed by the second author, which was checked and fine-tuned by the first author. Three rounds of analysis were done, one round for each of the three CMC sessions. Coding followed a grounded strategy (Strauss & Corbin, 1994). In each round of analysis approximately the same steps were performed. The data were first read through to gain an overall impression of the range of content. Then open coding was conducted to examine, compare and categorise the data. The process of organizing the posts in themes and sub-themes then commenced, with the starting point being the main themes around which the sessions were organized. Within themes and sub-themes, clusters were identified. Thus, the analysis process yielded a three level analysis: clusters within sub-themes and sub-themes within three main themes. All the steps in analysis were undertaken as an iterative, and sometimes a near-simultaneous process.

## **Results**

Five-hundred ten (510) posts were produced during the CMC sessions (212 on management, 146 concerning the project's mission and 152 on values).

### Session 1 – Main theme: management practices

This theme was divided in two sub-themes. In the first, the scientists were asked to brainstorm about good research management practices, drawing on their experience in other research projects. The second sub-theme focused on their experiences with poor research management practices. Two hundred and twelve posts were generated from this session. Twenty-seven of them were excluded from the analysis as they did not refer to the overall session themes.

With regard to participants' posts about good management practices, six clusters were discerned. Cluster one focused on the importance of a firm, clear, direct management style, with clear definition of leaders and coordinators, and with the establishment of clear goals. One example of this group of posts: "Top-down management leads to successful collaboration". Cluster two expressed appreciation for a participative, integrative and consultative style, based on consensus about the project's aims. Cluster three focussed on the idea of cross-fertilisation, with the wording of the posts in this pointing to the importance of proactively getting partners and disciplines to work together in a way that will produce synergy, as in this post: "Keep pushing us to work together & communicate for the whole project". Cluster four had to do with the need for transparency in decision-making,

and the value of a clear, open and constructive communication style. Cluster five focussed on the 'tone' of collaboration, emphasising the desirability of a polite, respectful, trusting and enthusiastic style. Finally, cluster six contained ideas for management strategies or initiatives, which could help turning differences into strengths, both with regard to the pan-European dimension of the project, and to the cultural/language diversity of it, as illustrated by this post: "Be aware of the trans-cultural nature of the project".

Six clusters were also discerned in the sub-theme management practices to avoid. Cluster one focussed on the need to avoid a weak and wobbly management style; conversely cluster two concentrated on the need to avoid a rigid, authoritarian and hierarchical approach to management, as these posts exemplify: "Individuals taking charge and dominating with their own agenda" and "Arrogant management can reduce good working". Cluster three had to do with the handling of ethical issues in a research project, analysis and reporting data. Cluster four was focused on the need for clear, fair policies regarding authorship. Cluster five dwelt on barriers to a project's timely progress that may result from fragmentation, unfeasible timelines, etc. Finally, cluster six concentrated on problems due to dominance attempts by one or several disciplines over others, and on dominance of the English language, as this post illustrates: "Competitiveness and doggedness of one discipline against others".

#### Session 2 – Main theme: mission

One hundred and forty six posts were generated in this CMC session. Eleven were excluded from the analysis as they were not related to the theme under discussion. The aim of the session was to provoke the scientists to reflect aloud about their ideas, up to that point, on what the mission of ALICE RAP is (if any).

Drawing on the posts' content, two main clusters were identified, distilling the concept of mission into two concepts, 'mission, and also 'vision'. Starting with the later, the cluster focussed on vision stressed the importance of fostering public debate and influencing European policy and practice to better address the problems associated with addictions, as illustrated by the following posts: "Reframe addictions in Europe to redesign addictions governance" and "ALICE RAP should foster an informed and responsible debate to bring about change". The goal of "reframing", that is actually part of the project's official title and one of its central goals, appeared in the posts indirectly, related to ideas of "change", "new thoughts".

Regarding cluster on mission, the posts suggested the need for broadening the ways of researching and understand addictions, especially through increasing the synergy among sciences and through trans-disciplinary research. The advance of science was seen as a consequence of "Identifying gaps in current knowledge" and "Breaking barriers across disciplines, boundaries, substances" in order to be able "(...) to capture the whole elephant".

### Session 3 – Blogging on values

A total of 152 posts were made during the session. Twelve posts were excluded from the analysis using the same criterion stated before. Participants were asked to discuss the degree to which scientific and societal core value differences among scientists could be viewed as strength, and ways that value differences could be addressed during the unfolding of a TDR. It was emphasised that the session was intended to get participants thinking about core values, rather than to come to any conclusions or closure.

Content analysis of the posts distilled the concept 'values' into two sub-themes, societal values and the role of values in science. In the sub-theme on societal values, two clusters were discerned. The tone of cluster one posts was that 'reframing addictions' could/should include actions to reduce stigmatization and marginalization, and better understand/respect addiction from users' perspectives. There was a call to rethink/broaden the concept of addiction, the negativity associated with it, and to consider possible positive aspects of drug use, such as the value of pleasure. In a similar vein, there were posts about the way in which addiction problems are defined, and by whom, as exemplified by this post: "Need to question the value basis of defining use as a problem". There was also concern about the "the drug user's perspective" not being sufficiently considered in research nor in policy.

Cluster two posts referred to society as a whole, pointing out how policies in consumer society are driven by political ideologies based on market rules and profit, as exemplified by these posts: "Weapons to fight profit making governments", "Prioritizing public health over markets". Participants also commented on the medicalization of society, the need to address inequalities, and the importance of individual's rights with regard to stigma, as reflected in these two posts: "Issues are medicalized and this disrupts our social understanding", and "Help should be available without stigmatizing people". The posts in this cluster also remarked on the way the present models of addiction governance promote marginalization, and serve as mechanisms of control, possibly with science's connivance: "Is addiction becoming an "industry"? Are we propagating that?"

The second sub-theme, the role of values in science, is composed of two clusters, one having to do with ethics, and other having to do with the need for scientists to illuminate and debate their values. Cluster one on ethics had to do with the need to do ethical science, and the difficulties of doing ethical science, illustrated by these posts: "Values can be reflected on and challenged in such a multidisciplinary group" and "Scientists can come under many pressures to adjust their message". Cluster two posts addressed directly the theme of session three, with these posts being illustrative: "Recognise the importance of the influence of values in what we do" and "Collaboration with others helps us to develop shared values". There was also some attention to science's possible vest interest in addiction, as illustrated by this post: "Researchers are in danger of expanding the concept [presumably of addiction] out of self-interest (funding)".



Finally, a major aim of all three CMC sessions was to generate interaction amongst the tables, by posting to a common chat room that all could see on the screens around the room. There is evidence that this happened to some extent. For example, this exchange about science and values involved four tables:

“Anything other than abstinence isn’t being addressed in the UK”

“agreed/science is not value free”

“Science is not value free”

“But science tries to be relatively objective”

“Science not value free but disciplined”

## **Discussion**

The main result with regard to management practices, rather expectedly, was that the participants wish for a leadership style that balances firmness and clear direction on the one hand, with openness and a consultative style on the other hand. Perhaps less expected was the degree to which participants focussed on challenges related to diversity in the ALICE RAP research team. A warning was sounded about possible diversity-related dominance problems of two types: dominance by one or several disciplines over the others, and dominance of native English language speakers over the others.

The later point ties in with another note of caution illuminated by the CMC: ALICE RAP is not just transdisciplinary, it is also transcultural. As far as we are aware, the literature on TDR has not until now considered how language and culture heterogeneity affects the quality of TDR, and the study of this issue would make a unique contribution to the TDR literature. ALICE RAP is of course aware of the heterogeneity in its human capital, and has attempted to manage the diversity for best advantage, as recommended in the literature (Brett, Behfar & Kern, 2006; Thomas & Ely, 1996; Dass & Parker, 1999). The management structure of ALICE RAP was set up to ensure effective collaboration and communication in the context of managing a very large multicultural, multidisciplinary and complex scientific team. While one might choose to assemble a team with low diversity to increase manageability, the business management literature suggests that project teams made up of members with differing cultural and disciplinary backgrounds can bring comparative advantage to a project, and business teams with diversity have been found to perform better, compared to homogeneous teams, when diversity is managed proactively (Brett, Behfar & Kern, 2006; Thomas & Ely, 1996; Dass & Parker, 1999).

However, business teams characterized by diversity may differ in important ways from science teams with great diversity, for example, with regard to motivation for collaboration and anticipated rewards. The management lessons gleaned from business management may not be fully applicable to a project like ALICE RAP.

A finding of particular significance that emerged from the CMC has to do with values. It might have been the case that as scientists, the participants would have focussed on the eternal debate about value-laden versus value-free science. However, the widely held position was that science is value-laden, that values should therefore be illuminated, and that ALICE RAP should make an effort to develop shared values. Considerable attention was also paid to societal values regarding the nature of addiction, and the need to reframe the problem of addiction so as to reduce stigmatisation and marginalisation of people with addictions.

*The CMC methodology*                      One of the greatest challenges to the management of complex teams such as ALICE RAP is to establish effective communication, including methods to foster sufficient interaction among team members. As noted in the Introduction, CMC in various forms has been used for this purpose for decades, in many settings – but not in the research arena generally and not in addiction science in particular, as far as we are aware.

The ALICE RAP experience reported here demonstrates that the use of CMC can facilitate strong bridging in a dense networked structure, over a very short time period. Our particular implementation of CMC methodology enabled over 100 addiction scientists and non-academics, grouped in nine roundtables, to simultaneously undertake intra- and intergroup discussions on complex themes, while not losing face-to-face interaction. Thus, CMC is a dialogue approach to TDR that generates rapid, direct and open communication.

The ALICE RAP coordinators have used the results of this study to inform management strategy, maintaining a transparent, firm, but participative management style. In addition, they are stimulating synergy by facilitating transdisciplinary publications that cross ALICE RAP Areas and Work Packages. They have also developed a framework for the project built on analyses of the states of wellbeing developed by the OECD (OECD, 2011).

One aspect of CMC as implemented at the ALICE RAP May 2011 research meeting deserves special consideration: the roles of the table chairs and table reporters, who were instructed to ‘facilitate discussion’ and ‘keep posts short and snappy’. There was variation in the chairing styles and chairs’ levels of influence over the discussions. Some chairs simply kick-started discussions and then participating as equals with the other participants, while others implemented a strategy to maximise inputs from everyone and/or assisted with the summarising of comments.

Similarly, the techniques of the reporters varied, from reporting comments verbatim to rephrasing or even reinventing comments. Also, as mentioned above, as with any reported discussion, selective attention on the part of the reporters (determined by their own interests, personalities and conceptions of their roles as reporters) is likely to have influenced which pronouncements made it onto the screens and which didn’t. For instance, it was observed that some topics that were debated at some length resulted in only one post, presumably because the reporter wished to avoid multiple postings of the same basic

idea.

Thus, the 'raw' data – the actual pronouncements – underwent one to two levels of processing (by the chair and/or by the reporter at each table), potentially modifying actual pronouncements. However, it seems likely that the posts more closely reflected the multiple positions of participants, compared to the notes of a traditional breakout procedure, because the CMC procedure allowed reporters to rapidly type many posts.

A few other aspects of table dynamics are important to note. There was clear evidence for interaction amongst the tables in all three sessions, as noted at the end of the Results, but it is also clear that certain tables devoted much of their attention to intra-table discussion of selected themes. This could have been due to particularly active table participants who wished to focus on subjects of special interest to them, or to the guidance of table chairs, or to the selective attention of the table reporters, or due to all three sources of influence. The clearest example of such concentration was nine posts on user participation in addiction policy and science, most of them from the same table.

Aside from table dynamics, some technical and administrative aspects of the CMC sessions could be improved. For example, the rolling text on the monitors allowed only the most recent posts to be viewed at any one time. Heights of posting frenzy (and at times it was very frenzied) probably resulted in important ideas going unnoticed before disappearing from the monitors. Some method is needed to keep posts visible longer; perhaps by using arrays of monitors such as airports use to post rolling information on many flights.

Limitations of the current study include the potential for endogeneity in our research design. The profiles of participants (experience, talent, abilities, expertise) could explain their degree of active participation in the CMC sessions. Another possible problem of endogeneity is that the discussing and observing of posts most likely influenced participants' choices in making pronouncements, similar to an effect observed in focus group discussions (and controlled for in individual interviews). This can result in a loop of 'causality' that bounds a discussion in unpredictable ways. However, all breakout techniques have this potential, not just CMC as it was implemented in this study.

## **Conclusions**

In conclusion, our study is of significance because it provides unique documentation showing how CMC can be implemented to assist communication and management in large scale addictions TDR, and how CMC can generate a high degree of interaction on complex themes, between scientists from many backgrounds and traditions. We doubt that such rich data could have been generated in ALICE RAP by more conventional meeting communications methods.

## **References**

Brett, Jeanne, Kristin Behfar, and Mary C. Kern. 2006. "Managing Multicultural Teams". Harvard

Business Review, 84(11): 85–91. doi: 10.1108/02621719510086165. Available at: <http://hbr.org/archive-toc/BR0611>.

Dass, Parshotam, and Barbara Parker. 1999. "Strategies for Managing Human Resource Diversity: From Resistance to Learning". *The Academy of Management Executive*, 13(2): 68-80. Available at <http://www.jstor.org/stable/4165541>.

Mittelmark, M. B., Do Amaral-Sabadini, M. B., Anderson, P., Gual, A., Braddick, F., Matrai, S., & Ysa, T. (2012). Computer-Mediated Communication in Alice Rap: A Methodology to Enhance the Quality of Large-Scale Transdisciplinary Research. *The Innovation Journal*, 17(3), 1.

OECD. 2011. "How's Life? Measuring well-being". OECD Publishing. Doi: 10.1787/9789264121164-en. Available at <http://dx.doi.org/10.1787/9789264121164-en>.

Strauss, Anselm and Juliet Corbin (1994) "Grounded theory methodology: An overview". Pp. 273–85 in *Handbook of qualitative research*, edited by Norman K. Denzin and Yvonna S. Lincoln. Thousand Oaks, CA, US: Sage Publications.

Thomas, David, and Robin J. Ely. 1996. "Making Differences Matter: A New Paradigm for Managing Diversity". *Harvard Business Review*, 74(5): 79-90. Available at <http://hbr.org/products/96510/96510p4.pdf>.

## Chapter 4 Leadership Sub-study

### Aim

A telephone interview survey was used to gain insight about ALICE RAP's leadership strategy, and its coordination and communication methods.

This Sub-study focused on the throughput element of the BMCF (Figure 1).

### Participants

Following the ALICE RAP meeting in Barcelona in May, Walter Farke and Sylvia Jung conducted 21 telephone interviews with Work Package leaders and the Chairs of the Media and Communications Group and the Global Science Group.

### Methods

The bulk of the tape-recorded interviews were conducted between 16-29 June 2011. The interviews lasted anywhere from eight minutes up to 40 minutes, following a structured interview guide. Additionally, Maurice Mittelmark completed one face-to-face interview with a Work package leader. One Work Package leader could not be interviewed within the time frame of this task. All Area leaders participated.

### Results

The interview guide is shown at the end of the Sub-study report. Several of the questions are relevant to an overall analysis that will be undertaken at the end of ALICE RAP (questions 1-3, 5-6) and data from those questions are not reported here (but rather in the Results section of this report). The results from the leadership questions are discussed below, following the question order of the interview guide.

*4. From your perspective, does ALICE RAP have a clearly stated main research question that is relevant to all participants?*

The answers to this question indicate a wide range of opinion. The majority of respondents said 'no' or 'not at this stage', and two felt it was not needed and not feasible to formulate. Several of the people who said "no" to having a research question, responded that they believed Alice Rap did have an overarching aim. A few participants were of the opinion that a very broad question has been formulated, having to do with the concept of addiction, its link to lifestyle and a need for reframing. These responses were very similar to those who felt there was not a "question" but an "aim". Two respondents strongly believe that having a unifying research question is essential for the project and important for all the researchers to understand. No answer to this question mentioned substance use, only the term addiction was used.

This interview question was difficult to word, and wording problems may have yielded

answers that are less useful than we hoped for. The quality criteria to which this question relates is translated from the German to the English in this way: “Is a common research object formulated that covers the whole research team, and can it serve in the research process as a basis for knowledge integration?” (Bergmann et al., 2005). We judged that the concept ‘common research object’ is not well enough understood and sought other wording. We considered ‘mission statement’ and ‘main research question’, and chose the latter. However, it seems the respondents tended to interpret the question as having to do with the concept ‘research question’ in its disciplinary sense. One respondent stated that ALICE RAP does not have a main research question but that his/her Work Package does have one.

Perhaps better wording could have been chosen: vision, mission, purpose, aim goal and focus come to mind. Alternatively, we could have tried to use and define the term ‘common research object’, but we doubt the feasibility of that option, especially as we were committed to a very short interview.

*7. Do you feel that you and your organisation have resources, experience or expertise that ALICE RAP could make better use of?*

Five respondents said they did feel their institution could contribute more than is already planned, in the areas of prevention, communication, the young, and classifying addiction. Others thought that they might be able to contribute more as the project unfolds. Altogether about half of the respondents thought it might be possible to contribute more at some time or other. As ALICE RAP seeks cross-area and cross work package fertilisation, it may be useful to know that people seem open to the idea of greater contribution. However, we suggest that this possibility be broached with sensitivity. That is because some respondents already feel stretched tight to meet their goals with their present resources, and a few feel they are doing all they can with the funding level they have.

*8. Imagine this situation: you become aware that something is going wrong with ALICE RAP, and you really want to do something about it. Who would you go to first and foremost, to get a solution going?*

All except one respondent seemed to have clear sense about the lines of responsibility and authority they would use to report a problem. Area Leaders and Work Package Leaders mentioned the Project Coordinator and the Scientific Coordinator of ALICE RAP (Gual and Anderson). No Work Package Leader mentioned an Area Leader, though a few said they would decide based on the nature of the problem. There were contrasting views about ALICE RAP’s structure for handling problems, with the opinions expressed that there is a clear structure, and that a structure for problem solving is yet to be set.

Two participants felt it was dependent on the kind of problem they were encountering. One

participant stressed the importance of formulating a “positive” solution before approaching the leadership with an issue. Overall, the tendency expressed is to go straight to Gual/Anderson.

*9. Imagine that ALICE RAP suddenly sees the need to change its research strategy to meet some new scientific opportunity; do you feel ALICE RAP has sufficient autonomy and resources to take on such unforeseen developments?*

This question revealed a wide range of opinion. Some felt this would not be a problem, and one mentioned that the European Commission (EC) is quite flexible about changes, at least after the first half year or so. Several participants were confident that the human resources within ALICE RAP could handle such developments but questioned the flexibility of the EU. Others feel it is not possible to change direction, citing issues such as the size of the project, the number of people involved and long timeframes of some of the activities already planned. Still others are not sure. Two respondents seemed to become anxious at the idea that they might need to incorporate new work since they feel so stretched with their current commitment and budget. Several expressed the opinion that it is vital that ALICE RAP have the ability to adjust to new opportunities.

One respondent related this issue with the formulating of the “research question” suggesting that having a broadly defined aim would allow greater dexterity in responding to new developments.

Opinions about this matter may have significance for ALICE RAP’s functioning, because one’s beliefs about the degree of flexibility that is possible may influence the degree to which one is alert to possibilities for innovation. If one believes there is no flexibility, one may not recognise, or pursue opportunities for innovation.

*10. When you work in a project like ALICE RAP, how frequent do you think communication should be, and through what channels do you prefer to receive and send information?*

This question generated a great deal of opinion, more so than any other question. At the Work Package level, email, telephone and Skype were mentioned as preferred channels.

At the Area level, the importance of discussions held as often as twice a month and as seldom as four to six times a year was mentioned. One respondent felt Area Leaders should be in contact about every two months. An opinion was expressed that Areas should meet twice a year, not just once a year as planned.

At the project level there is a serious difference of opinion about the frequency of communication that is preferable. The opinion was expressed that inter-Work Package

communication is not needed. There are obvious consequences for cross-Work package and cross-Area fertilisation following from this opinion. At the same time, there was support for the idea that communication at the project level should be quite frequent. Some wish for two meetings per year, yet others wish for very few meetings, preferring the use of email and telephone and teleconference. While the Internet was mentioned by a few, support was not particularly enthusiastic, and relatively many respondents expressed a preference for email communication and teleconferences. There was also mention of the need to be reminded about deadlines and deliverables, both scientific and financial.

Several strategies were offered for making communication as effective as possible. While many people felt that a website should not be that main medium for communication, one respondent made some suggestions about how to make it as useful as possible by keeping the content up-to-date, emailing newsletters with links to information on the site, intensifying activity on the website according to the timeline of the project. Another respondent thought the website could serve as a discussion area and a repository for documents and literature. One suggestion for teleconference was that they should be kept to a maximum of six people to facilitate discussion. A repeated suggestion of respondents was to avoid overloading participants with excessive communication.

*11. Do you have any suggestions for specific actions that ALICE RAP can take to promote the greatest possible trust and respect among the partners?*

The opinion was expressed that existing good relations at the start of ALICE RAP give the project a good start and that the level of trust at this point is high. Suggestions for specific actions included ensuring transparency in decision-making, honesty, clear communication about goals and expectations, keeping promises, creating excitement, involving all leaders in activities at the EC and global level, responding quickly to questions and requests, good communications, showing mutual respect, and achieving the goals of the project.

The kick off meeting held in Barcelona in 2011 ('Barcelona meeting') was mentioned, with one respondent saying that it was outstanding and that ALICE RAP should do a meeting like that every year. Another wished for face-to-face meetings twice a year. However, another respondent said that Barcelona-like meetings should take place only when there is a need to discuss the science. One participant stressed the improved communication that is achieved in face-to-face meetings rather than virtual communication. On the negative side, one participant felt that the Barcelona meeting was too expensive and was unhappy to learn that the attendance expenses were covered from the project partners' budget. Another felt that the separation of the Steering Committee from the rest of the group during the lunches in Barcelona actually eroded a feeling of equality and therefore trust.



*Do you have any suggestions for how we can improve the way the Evaluation Work Package is doing its work?*

Opinions were mixed. One respondent said the interview was not needed, while several said they appreciated the chance to express their opinions so soon after the Barcelona meeting. One respondent wanted to know more about how the evaluation will work, while another said he/she had a very clear understanding of the strategy regarding the evaluation process. One respondent said “I think it is great that you are doing it from the start. Will you be feeding that back as an interim report as we go?.. so what we say ... will feed into the next stage”?

### **Discussion and conclusions**

The results of this Sub-study were discussed by the ALICE RAP leadership team, and it was agreed that ALICE RAP should develop Vision and Mission statements. There ensued a round of consultations, leading to the adoption of these statements, which are featured on the home page of the ALICE RAP web site:

*Vision Statement* -- Promote well-being through a synthesis of knowledge to redesign European policy and practice to better address the challenges posed by substance use and addictive behaviours.

*Mission Statement* --

Advance synergy among sciences that address substance use and addictive behaviours, through a five-year programme of European trans-disciplinary research.

### **Reference**

Bergmann M, Brohmann B, Hoffman E, Loibl MC, Rehaag R, Schramm E, Voß JP (2005). Quality Criteria of Transdisciplinary Research. A Guide for the Formative Evaluation of Research Projects. ISOE-Studientexte, No. 13/English version. ISSN 0947-6083. Institute for Social-Ecological Research (ISOE) GmbH, Frankfurt am Main.

### **Interview guide**

We are asking all ALICE RAP leaders the same questions in this first round of telephone consultations, which is being done as part of the ALICE RAP evaluation, which is Work package 21. Because your time is precious, we are happy to receive answers at any level of detail you wish to give; you are in charge of how long this consultation will be. I just want to remind you that the purpose of this consultation is to get feedback that may help ALICE RAP to improve its functioning and reach its goals. We also need some background

information about the early days of ALICE RAP, before the funding was obtained. When information you provide is used in reports, it will be completely confidential. If we do wish to use a direct quote, we will only do so if you give written permission. So that I don't have to take notes, I'd like to record this session. However, if you prefer, of course I won't make a recording. What is your preference?

Thank you! Then let me ask the first of a total of 10 questions; I'll number the questions as we go along so you can monitor where we are in the process.

1. Please tell me about your role or roles in the development of ALICE RAP.
2. If you were to single out one main reason why you decided to participate in ALICE RAP, what is that reason?
3. When you were considering if you would be a part of ALICE RAP or not, what would have been a good reason not to take part?
4. From your perspective, does ALICE RAP have a clearly stated main research question that is relevant to all participants?
  - a. If yes, what is that research question, in your own wording?
5. Can you say something about your home institution's attitude towards your participation in European Union projects like ALICE RAP?
6. Given what you know about the tasks ALICE RAP will undertake, can you say something about the adequacy or inadequacy of ALICE RAP's financing?
7. Do you feel that you and your organisation have resources, experience or expertise that ALICE RAP could make better use of?
  - a. If so, please explain.
8. Imagine this situation: you become aware that something is going wrong with ALICE RAP, and you really want to do something about it. Who would you go to first and foremost, to get a solution going?
9. Imagine that ALICE RAP suddenly sees the need to change its research strategy to meet some new scientific opportunity; do you feel ALICE RAP has sufficient autonomy and resources to take on such unforeseen developments?

10. When you work in a project like ALICE RAP, how frequent do you think communication should be, and through what channels do you prefer to receive and send information?

11. Do you have any suggestions for specific actions that ALICE RAP can take to promote the greatest possible trust and respect among the partners?

I want to give you the opportunity to add any comments you wish to make, and I would also appreciate feedback on this consultation; do you have any suggestions for how we can improve the way the Evaluation Work Package is doing its work?

## Chapter 5 Science and Policy Dialogue Sub-study

### Aim

The aim of this Sub-study was to address a key goal stated in the ALICE RAP Description of Work: to include “clear and targeted dissemination and valorisation strategies, addressing and involving not only scientific audiences, but also policy-makers, other key actors and stakeholders...” This was judged of substantial importance by ALICE RAP leadership, because one of the hallmarks of high quality transdisciplinary research is the real involvement of so-called real world actors, as Lang et al (2012) emphasise in their writing on building a collaborative research team: “Identify scientists from relevant disciplines/scientific fields and “real world actors” who have experience, expertise, or any other relevant “stake” in the problem constellation pre-identified for the research project.” The question ALICE RAP faced at the outset of this Sub-study was what does ‘involving’ mean, and who shall we seek to involve?

This Sub-study focused on the quality criterion of the QCTR (Figure 2), related to the participation of the community in TDR.

### Participants

Data were collected at the Newcastle partners’ meeting (17 May 2012), during a 45 minute computer-mediated communication (CMC) session devoted to this topic. All participants in the room at the time of the session were asked to participate. Fifty ALICE RAP participants contributed to this CMC session, working in eight groups, with each group facilitated by a Table Coordinator and a Table Reporter. The smallest group had four participants and the largest had eight participants.

### Methods

To assist the session discussions at the round tables, the round tables were offered several possible scenarios regarding levels of involvement that seem feasible for ALICE RAP:

- Sharing information, discussing issues, giving mutual support – a good example of this is the recent full day seminar organized by ALICE RAP and Rand with UK policy-makers, on the subject of alcohol pricing. We could continue to seek opportunities for one-off seminars and meetings of this kind. Would this level of involvement be enough to satisfy our need to involve real world actors?
- Joint consultation and advise-giving and –taking – A frequently used mechanism for this is to establish a project advisory group whose membership is composed of real world actors, that meets from time to time with project researchers to jointly consider problems, opportunities and progress, usually with a report produced after each meeting summarizing advice and recommendations. Would this level of involvement be enough to satisfy our need to involve real world actors?

- Planning and deciding together – At this level we would go beyond ‘mere’ collaboration to partnership. This move would give real world actors roles to play in ALICE RAP, with voices equal to the rest of us. An example would be the creation of a Policy-makers Group having the same level of involvement as the Global Science Group and the Media and Communications Group. Would this level of involvement be enough to satisfy our need to involve real world actors?
- Acting together and taking responsibility together – This is also partnership-level collaboration, the type in which two or more organisations enter into a formal agreement stating a joint mission, committing resources, and working towards the production of synergy. This has become a very common model for getting science, civil society and government working together. Examples of organisations we might consider establishing a partnership with are the Global Commission on Drug Policy, or the Drug Policy Alliance, or The International Drug Policy Consortium, or several of these or similar organisations with real world agendas and real world influence. Would this level of involvement be enough to satisfy our need to involve real world actors?

The round tables were asked to discuss these questions:

1. Do any of these exemplar levels of involvement seem best for ALICE RAP (not the details, just the basic ideas)?
2. Are particular combinations advisable?
3. Should any of these levels be avoided?

Computer-mediated communication was used. Each round table was equipped with a PC, and all the PC’s were linked to large screens in the room as that all participants could see at least one large screen. As participants brains-stormed the session questions facilitated by the table coordinator, the Table Reporter used the PC to enter key words coming from the participants (posts). The posts were integrated so that the large screens showed all posts from all tables. This was meant to stimulate cross-table reflection and stimulate discussion.

The Sub-study data were the posts. The analysis focussed on the posts that were directly relevant to the question the CMC session was intended to address: What level of involvement in ALICE RAP should we aim for, with regard to policymakers and other key actors and stakeholders?

## Results

There was evidence that the groups succeeded in focussing on the relevant question, as in these early posts:

“Once going for a transdisciplinary approach, the role of policymakers changes, from

the traditional scientific position to a new one. Where do we place the role of those policymakers?”

“NOT the traditional approach of ‘here are the results’, but working with them from an early stage to develop the process. A real transdisciplinary approach should involve policymakers.”

“Active engagement is positive for policy, good for ALICE RAP to push forward”

The analysis revealed two main themes:

Theme 1: “It is a good idea to involve policymakers in ALICE RAP, is it not?”, “Be bold!” and “why not partnership at a high level?”

These exemplify a cluster of posts that speaks to the positive aspects of policymaker involvement at more than a token level. Sentiments were expressed that early involvement of policymakers would help build trust, could position ALICE RAP to have more influence on policy processes, would provide a way to get feedback on our work as it progresses, and would provide a way to “ask policymakers what they need and what involvement they need.” There was also some consideration of stakeholders other than policymakers:

“Should ALICE RAP enter into a dialogue with producers, customers apart from policymakers”, and

“We need to build in a mechanism for feeding back to people not just policymakers”

Nevertheless a certain amount of scepticism was expressed about the dangers of being ‘inside the gates’:

“Can you engage without being influenced or corrupted?”, “Huge risk of abusing the objectivity of science” and “your research integrity is more at risk inside the gates”

These exemplify a cautionary note sounded in some groups, representing the opinion that ALICE RAP should avoid too direct involvement with stakeholders. Others were not as worried about stakeholder involvement:

“Responding to policymakers’ needs doesn’t mean being subservient to them” and “Idea that policymakers could ‘disrupt’ the science not considered a big risk” express this point of view.

ALICE RAP participants expressed a range of views about the wisdom of involving policymakers in the project’s work; there is no clear-cut advice to ALICE RAP management in this regard.

Theme 2: Which policymakers to involve, and at which levels?

Perhaps the richest information to come from the CMC session focussed on the possible

need to differentiate our involvement with stakeholders: it may not be wise to have a single stakeholder platform in ALICE RAP, as we have in the Global Science Group and the Media Group. ALICE RAP may be too complex for a single approach, and may also have different needs for stakeholder involvement at different stages of the project. It may also be that involvement should happen at the country, or even community levels, rather than at a European level. Further, the nature of involvement may need to vary depending on what aspect of ALICE RAP's work is in focus. These posts illustrate some of these issues:

“[In] some areas it's important to involve policymakers from start – others better to involve at end with results”

“Policy advice should be country/community specific”

“Distinguish engaging with or having impact on politicians or policymakers – could be different audiences”

There was also consideration of diversity in the addictions issues that ALICE RAP deals with, which might call for differentiation in working with stakeholders, as this post illustrates:

“Inside versus outside – where does ALICE RAP want to be – is it substance specific?”

There was also some consideration of the notion that ALICE RAP is already involved with policymakers via our collaboration with the European Commission, and a reminder that political scientists in ALICE RAP could provide opportunities to build bridge to policy.

## **Discussion and conclusions**

The starting point for the CMC session on policy-science dialogue was the assumption that ALICE RAP has to engage stakeholders, as that is an essential aspect of TDR. The issue, then, is how to involve stakeholders. Scenarios were provided to illustrate possible levels of involvement, ranging from simply engaging stakeholders in dialogue, to acting together and taking responsibility together.

The findings suggested a differentiated strategy for stakeholder involvement, tailored to particular aspects of addiction, to country or community levels of interest, and to the different stages of the project as it progresses, with the emphasis on 'communication with' stakeholders, rather than 'communication to' stakeholders. The project's communication strategy has been revised on a regular basis throughout the lifetime of the project in order to adapt the scope and extent of policy- and stakeholder-related activities according to this differential approach. Deliverable 'D20.3 Decision makers' dialogues' describes the activities in detail.

## **Reference**

Lang DJ et al (2012) Transdisciplinary research in sustainability science: practice, principles, and challenges. Sustainable Science. DOI 10.1007/s1165-011-0149-x.

## Chapter 6 Research Orientation Sub-study

### Aim

This sub-study was undertaken to provide ALICE RAP with insight about its scientists' orientations to research collaboration after two years of the project, and again at the conclusion of the project.

The rationale for collecting these data was ALICE RAP's transdisciplinary orientation, which encourages the different disciplines to "transcend their separate conceptual, theoretical and methodological orientations" (Rosenfield, 1992), to develop a shared approach to ALICE RAP's research, building towards reframing addictions policy in Europe. The potential for such transcendence has been demonstrated in several previous studies, including TDR research involving health sciences and social sciences (ibid). This potential is of special importance to ALICE RAP, which has a rich mix of biomedical and social scientists representing a wide range of disciplinary perspectives. However, moving in the direction from multidisciplinary to transdisciplinary research is challenging because disciplinary traditions and cultures reinforce parallel disciplinary approaches to social problem solving, rather than transcending disciplinary silos as TDR calls for (Rosenfield, 1992).

This Sub-study focused on the quality criterion of the QCTR (Figure 2), related to the participants' openness to other disciplinary views.

### Participants

2013 - On the last day of the April 2013 Barcelona Partners' Meeting, the Research Orientation Scale (Table 2) was completed, with 59 participants.

2015 – At the September 2015 Lisbon Partners' Meeting, the Research Orientation Scale was completed as a self-report questionnaire, with 59 people returning questionnaires. However, some people attending the 2015 meeting and completing the Research Orientation Scale were guests and not involved in ALICE RAP. The number of ALICE RAP respondents was 42, of which 38 provided data on the Research Orientation Scale and on the sex and age variables.

### Methods

The Research Orientation Scale was distributed to all persons in the meeting room during the 2013 and the 2015 partner meetings. Using the 2013 baseline data, descriptive statistics were used to document the sample's characteristics (sex, age and scientific field), to examine the inter-correlations among the 10 Research Orientation Scale items, and to examine the joint distributions of the 10 items by sex, age and scientific field. This was followed by factor analyses.



## Results

The characteristics of the 2013 and 2015 study samples are shown in Table 3.

The Research Orientation Scale has a theoretical range from 0 (lowest orientation to TDR) to 50 (highest orientation to TDR). The overall mean score for the combined sample was 27.52 with a standard deviation (SD) of 4.85 in the 2013 data. The scores were slightly skewed in the direction of a high TDR orientation. The distribution of the Research Orientation Scale in the 2013 data is shown in Table 4. The 2013 inter-correlations among the Scale items are shown in Table 5. Items 1-3 comprise a unidisciplinary dimension, items 4 and 5 comprise a multidisciplinary and items 7-10 comprise a transdisciplinary dimension. Table 5 highlights the statistically significant correlations in boldface type. Of the 12 significant correlation coefficients, five coincide with the three dimensions. Tables 6-8 show the 2013 Research Orientation Scale item distributions by sex, age and scientific field, respectively. Figures 3-5 show the 2013 joint distributions of the Research Orientation Scale items by age, sex and scientific field, clustered by Rosenfield's (1992) postulated dimensions. Figure 3 shows the three unidisciplinary items, Figure 4 shows the two multidisciplinary items and Figure 5 shows the five inter/transdisciplinary items.

Exploratory factor analyses yielded a single factor composed of items 4, 5, 8, 9 and 10 (Cronbach's Alpha of 0.80):

- While working on a research project within my discipline, I sometimes feel it is important to seek the perspective of other disciplines when trying to answer particular parts of my research question
- Although I rely primarily on knowledge from my primary field of interest, I usually work interactively with colleagues from other disciplines to address a research problem
- In my own work, I typically incorporate perspectives from disciplinary orientations that are different from my own
- Although I was trained in a particular discipline, I devote much of my time to understanding other disciplines in order to inform my research
- In my collaborations with others I integrate theories and models from other disciplines

A sum was computed using the 2013 raw scores. Its distribution was non-normal, as shown in Figure 6. The sum score was recoded as a dichotomous variable with scores of 0-4 labelled as 'lower transdisciplinarity' and 5 labelled as 'higher transdisciplinarity'. This variable was not correlated with scientific field, sex or age.

In the 2015 data, the mean Research Orientation Scale score was 30.4 (29.5 among women and 31.6 among men; scale range = 1-40; empirical range = 17-40). The Research Orientation

Scale was not distributed normally. The distribution of the 2015 Research Orientation Scale score by age and sex is shown in Figure 7. Noteworthy findings on the individual items were the majorities strongly agreeing or strongly disagreeing with these items:

- 52% strongly disagree -- The research questions I am often interested in generally do not warrant collaboration from other disciplines
- 52% strongly agree - While working on a research project within my discipline, I sometimes feel it is important to seek the perspective of other disciplines when trying to answer particular parts of my research question
- 55% strongly agree - Although I rely primarily on knowledge from my primary field of interest, I usually work interactively with colleagues from other disciplines to address a research problem
- 60% strongly agree - In my collaborations with others I integrate theories and models from other disciplines

### **Discussion and conclusion**

To summarise the findings, the three-factor Research Orientation Scale as reported by Hall et al (2008) was not evident in the present data. On that basis, exploratory analyses led to a single Transdisciplinary Research Orientation Scale, with five items yielding a non-normal distribution. A dichotomous transformation of this variable was unrelated to scientific field, sex and age. We conclude that the utility of the Research Orientation Scale items rests in the individual items' inter-relationships with the scientific field, sex and age variables, as shown in Figures 3-5.

Summarising, those in ALICE RAP with the greatest expressed proclivity for inter/transdisciplinary research are older men in the biomedical sciences and younger women in the social sciences. Yet, as Tables 6-8 show, respondents in this study generally expressed strong proclivity for inter/transdisciplinary research, regardless of scientific background, sex and age. This quite likely is due more to a selection effect than to an adaptation effect. The ALICE RAP leadership intended to recruit scientists with the needed scientific expertise and with proclivity for transdisciplinarity. While the experience in ALICE RAP between 2013 and 2015 may have affected scientists' attitudes towards transdisciplinary working both favourably and unfavourably, we conclude that at near the mid-point of ALICE RAP (2013), the partners' orientations to collaboration was already consistent with the transdisciplinary Mission of the Project.

The 2013 and the 2015 rounds of data collection yielded data that should be compared with substantial caution, since the sample frames (partners in attendance at the 2013 Barcelona and the 2015 Lisbon meetings) were different, even if drawn from approximately the same population (participants listed on ALICE RAP partners' lists). Notwithstanding this caution, we conclude that amongst partners attending the two meetings and participating in the Research Orientation Scale data collection, the mean Research Orientation Scale score was

similar, at about 28 in 2013 and in 2015. Experience in ALICE RAP seems to have neither decreased nor increased partners' proclivity for transdisciplinary research collaboration.

### **Reference**

Rosenfield P (1992) The potential of transdisciplinary research for sustaining and extending linkages between the health and social sciences. *Social Science and Medicine*, 35(11):1343-1357.

## Chapter 7 Collaboration Sub-study

### Aim

The aim of this Sub-study was to map collaborative contacts within and between ALICE RAP Areas and Work Packages. ALICE RAP is conceived as a transdisciplinary research (TDR) project. Great effort has been made to organise the project in ways that encourage the partners to cross administrative boundaries (Areas, Work Packages). Substantial parts of partner meetings have been devoted to discussions and consultations having the aim to stimulate the TDR atmosphere.

This Sub-study focused on the quality criterion of the QCTR (Figure 2), related to the TDR participants' interactions.

### Participants

The survey was sent to all partners on the ALICE RAP mailing list. The sample frame was the 183 names and email addresses in the ALICE RAP master partners' list provided to WP21 by the Coordinating team based in Barcelona. Of the 183 partners who were sent the online survey invitation, 73 responded with usable data (40%).

### Methods

To provide the project with feedback about the extent of inter-Work Package collaboration at about the mid-way point of the project, an online survey was conducted during June 2014. In this survey, respondents were asked to indicate how much collaboration they had experienced with each ALICE RAP work package. The alternatives were: (a) very little or no contact; (b) on the same mailing list; (c) have casual conversations; (d) exchange information useful to ALICE RAP; or (e) share some decision-making, make joint presentations or publications.

### Results

Responses were graphed in a network graph (Figure 8). The arrows relate to reports of collaboration at levels (d) exchange information useful to ALICE RAP, or (e) share some decision-making, make joint presentations or publications. Each solid arrow represents one Work Package member's report of interaction with at least one person in one's own Work Package, or in another Work Package. Closely stippled arrows indicate that two respondents in a Work Package reported similar collaboration, and the distanced stippled arrows indicate three respondents reporting the same collaboration (see Figure 8's legend for a visual explanation of the different arrow depictions). ALICE RAP has seven Areas with Area 7 having the coordinating function. Since communication from and to Area 7 is ubiquitous, it is excluded from the analysis.

Figure 8 indicates that certain Areas experienced more intense intra-area collaboration than others, with Areas 3 and 5 seeming to stand out in this regard. In the other Areas, certain combinations of Work Packages also seemed to experience more intense collaboration than did others, with the combinations 2-3 in Area 1 and 4-5 in Area 2 standing out.

### **Discussion and conclusions**

The data suggest that a great deal of inter-Area and inter-Work Package collaboration happened in the period before data collection. Yet, the pattern was of substantial heterogeneity, with Area 3 seeming to be a beehive of inter-Area collaboration, and Areas 2 and 5 beehives of intra-Area collaboration.

In their interpretations of the instructions for completing the survey, there is reason to believe that respondents pondered personal instances of collaboration. Area 6 communicated at level (d) 'exchange information useful to ALICE RAP' frequently with all other Work Packages, yet arrows of collaboration from other Areas to Area 6 are almost entirely absent from Figure 3. It seems, then, that the data underrepresent the actual level of collaboration, and perhaps illuminate the more intense and inter-personal collaborations that the respondents experienced.

## Chapter 8 Futures Sub-study

### Aim

The Futures Sub-study aim was to use the Bergen Model of Collaborative Functioning, to document partners' perceptions of ALICE RAP collaborative processes and the degree to which they experienced synergy in the project. Data were collected using the online ALICE RAP Futures Questionnaire in 2014, with repeated data collection using the same questionnaire in 2015. These two rounds are referred to as Futures I (2014) and Futures II (2015). Futures I and Futures II Methods and Results are reported in separate sections, below. The Discussion of the two parts is consolidated.

This Sub-study focused on the input, throughput and output elements of the BMCF (Figure 1).

As background for Futures I and II, the Bergen Model of Collaborative Functioning posits three types of outputs. Additive outputs are those that would have been produced by the ALICE RAP partners even if ALICE RAP had not been established ( $2+2 = 4$ ), antagonistic outputs are those that would have been avoided if possible (e.g., wasted time, energy and/or resources;  $2+2 = 3$ ), and synergistic outputs are a type of interaction effect ( $2+2 = 5$ ).

A main focus of Futures I and II is the study of synergy. To position this idea, consider the following sentiments a partner might hold about involvement with other ALICE RAP partners near the end of the project:

#### Additive output

"The project was pleasant enough, but I guess nothing new really happened that we could not have expected anyway."

#### Synergy

"The project has really managed to achieve something new and important; we have got to find a way to keep going on this path together!"

#### Antagonism output

"The project has been serious waste of my time and energy. I am moving on to more productive work!"

This is but one way to conceptualise possible synergy, with others being more concrete: joint publications, new projects, new consortia and new teaching programmes, amongst many other possibilities. Yet it seems reasonable that an attitude expressing the desire to keep working with ALICE RAP partners to forward the ALICE RAP Mission, following the project's close, is a key intermediate synergistic outcome. With such a positive attitude, some of the

key conditions for moving beyond ALICE RAP are assured, with a base in ALICE RAP's work. By 'attitude' we mean an expressed predisposition to behave in a certain way. Attitudes do not determine future behaviour, but they do predispose people to act in certain ways if circumstances allow.

The Bergen Model of Collaborative Functioning proposes that a number of collaboration factors interact to result in more or less synergy. These include the inputs 'partner resources', financial resources' and the 'mission'. Also included are process (throughput) factors (the collaborative context) including 'input interactions', 'leadership', 'communications' and 'roles/structure'. These may facilitate two types of processes, those related to producing the agreed deliverables of a collaboration (production tasks), and those related to the functioning of the collaboration as a social process (maintenance tasks). This follows the understanding that any production system that is not maintained will eventually cease to function as intended.

Following from the above, the aims of FUTURES were to study ALICE RAP partners' experiences in ALICE RAP, and their attitudes towards future involvement with ALICE RAP.

## **Futures I**

### **Participants**

ALICE RAP provided the sample frame of 184 names and email addresses comprising all persons having a connection to the project as of October 2014. All in the sample frame were contacted via email during October 2014 with an invitation to participate in the online survey. One reminder was also sent. Eighty-four (84) responses were received (46% response rate) of which four respondents answered only the first seven of the 18 closed-ended questions (the seven items on the first page of the online survey). An additional 19 persons looked at the survey web page but did not complete any of the questionnaire items. Of the sample frame, 81 persons (44%) did not respond to the invitation to open the link to the survey. As a consequence of the guarantee of anonymity, no attempt was made to undertake a missing data analysis; the demographic characteristics of responders and non-responders are therefore not known. Taking all the above into account, the final analysis sample was  $n = 80$ .

### **Methods**

Conducted in the first half of November 2014, FUTURES I was situated in Month 44 of the ALICE RAP project. Approximately 75 percent of the 60 months allocated to ALICE RAP had passed, and the project was moving into its final full year. Thus, the timing was right to start consideration of outputs, in line with the Bergen Model of Collaborative Functioning. All data were collected online using the ALICE RAP Future Survey (Figure 9). Synergy was measured with two related constructs, one termed 'synergy' and the other termed 'continuity'. The synergy construct was operationalised with a sum score of three variables from the online

survey:

- ALICE RAP is achieving significant synergy in addictions research
- My work is so specialised that I do not need ALICE RAP
- The quality of ALICE RAP work does not meet my scientific standards (which can also be construed as a measure of antagonism).

The response alternatives were:

- I have not experienced this at all
- I have experienced this rarely
- I have experienced this occasionally
- I have experienced this frequently

The three variables are:

Attitudes about continuity -- partners' possible future involvement with ALICE RAP after current funding ceases -- were measured as a sum score of seven items:

- Endorse the continued pursuit of ALICE RAP's Mission of an evidence-based approach to addictions policy
- Connect to existing networks with like interests
- Establish smaller networks built around Areas and Work Packages of ALICE RAP
- Advocacy for the ALICE RAP Mission of an evidence-based approach to addictions policy in my country/region
- Establish a formal organisation at the European level to continue on the path of ALICE RAP
- Write research funding applications at country or European levels for follow-up to ALICE RAP
- Write scientific papers using ALICE RAP data

They used this four-point response scale:

- I will not participate
- I will endorse and support, but I will not participate actively
- I will participate as a supporting player, but my role must be modest



- I will participate extensively

The online survey also included multiple items intended to measure all the other elements of the Bergen Model of Collaborative Functioning. This is described in detail in the Results section.

To reduce response bias, the FUTURES questionnaire reverses about half the items' response scales, with some starting with the positive end of the scale and the others starting with the negative end of the scale. In calculating the scales shown for FUTURES I, the items are coded-recoded so that higher scales scores relate to positive attitudes.

Besides responding to the quantitative part of the survey as just described, respondents were given the opportunity to write remarks about each item.

## **Results**

First the quantitative results then the qualitative results are presented. The quantitative results are organised according to the Bergen Model of Collaborative Functioning. The Model uses nine scales, the descriptive statistics for which are given in Table 9. The analysis begins with data on the main outcome of interest in this report, synergy, for which there are two measures, the synergy scale (Figure 10) and the continuity scale (Figure 11). At the bottom of each Figure, a simplified diagram of the Bergen Model of Collaborative Functioning is shown with the relevant constructs highlighted in a gold rings as reminder of where each construct is placed in the Model (the output construct in the Figure 'deliverables' is not addressed in this report).

An important note is that the construct 'continuity' is treated as an attitudinal construct in this analysis (attitude towards possible future behaviour), since ALICE RAP was still underway when this research was conducted. Obviously, firm data on the actual level of continuity could be gathered following the close of ALICE RAP.

Figures 12-14 show results for the three input constructs: mission, people and money. Figures 15-18 show results for the four throughput constructs: collaborative atmosphere, leadership, communication, and clear roles and structures.

The relationships between the synergy and the continuity output measures and the three input and four throughput measures were examined using linear regression. First with synergy as the dependent variable, and then with continuity as the dependent variable, full models were generated with all input and throughput measures included in the analyses. The models were then simplified to include only the statistically significant predictors.

Table 10 shows the results for the synergy measure, for which only the mission and the collaboration measures were significant predictors, accounting for 55% of the variance in synergy.

Figure 11 shows the results for the continuity measure, with only the communication measure as a significant predictor, accounting for 25% of the variance in continuity.

### **Futures I qualitative results**

Here, all comments offered about each attitude measure are presented verbatim, in the order of the online FUTURES questionnaire.

#### **Comments on item 'Endorse the continued pursuit of ALICE RAP's mission'**

*"Absolutely, this is an important approach which I support fully. Active involvement through production of scientific contributions and guidelines. Also with consideration of what is meant by 'evidence'/ whose evidence etc./ 'civic science' approach As long as I see no pre-set biases, one way or the other"*

*"As professional, I meet difficulties in promoting evidence based approaches, regardless the speeches on this theme."*

*"I am part of International Advisory Group. It is not clear how some of these relate to me."*

*"I don't think it is so easy to agree on what should be this kind of "evidence-based approach". The effort to produce good research is easier to support."*

*"I feel the survey is not comprehensive enough to discuss the epistemic governance forces that are now very strongly figuring as a power force in this project, and I am now seeing that the epistemic governance actors that want to mainstream messages out of this project want to know our opinion. Yes? A Mission that is "evidence based" -- I do not even know what that means. In relation to what? public health?"*

*"If there is any follow up in which I could participate I would be happy to do so"*

*"It would be interesting and beneficial to maintain this interdisciplinary approach to ALICE RAP, combining different fields/approach/expertise and also allowing for different stages and types of analysis, within different areas and settings, and within and between persons (social, biological, psychological, epidemiological, psychopharmacological, cultural, etc.) and integrating these results into a model/framework/scheme (first within work packages and then between work areas; in my opinion the most challenging part) and then evaluating how the results/interpretation/interactions/conclusions obtained impact addiction policy in general when it comes to substances (also a very difficult task due to different views and approaches of the different disciplines, but very necessary and worth-while) and what implication it has for existing addiction policies (for different classes of drugs and also other factors that would be relevant to consider, if results/evidence indicate so. Every part of the process is crucial and important: the whole gathering and interpretation of the evidence and results and also the integration of the information and implications for addiction policies. It seems sometimes like the emphasis of ALICE RAP lies too much on policy formation solely. Also the communication and interaction between different areas of expertise should be very frequent. It should be an active network (not only at the yearly plenary meetings, but more effort and time should be invested in what is happening in between). ALICE RAP should become a specialised*

*discipline in itself, which is a full time job and requires a lot time, people and consistency.”*

**Comments on item ‘Connect to existing networks with like interests’**

*“Already in progress at the national level; to be checked the interest of some network such as Alcohol Policy Network, INEBRIA and similar. For sure EUFAS.”*

*“Connecting is difficult if this means travel expenditures.”*

*“I am co-author and leader in a policy book on [deleted]”*

*“I hope”*

*“I hope that existing networks can continue to work on new projects”*

*“I will support the participation of our [deleted] University academic centre in any such development”*

*“Unfortunately, it all depends on funding, no money no work...”*

*“yes of course”*

*“Yes, absolutely”*

*“Yes, part of job”*

**Comments on ‘Establish smaller networks built around some of ALICE RAP’s Areas and Work packages’**

*“I am interested in speaking to colleagues about this”*

*“I think this has already started”*

*“I will not take the lead but will be interested in looking at any such proposal”*

*“If we will have a good leader, it is feasible”*

*“Unfortunately, it all depends on funding, no money no work...”*

*“we did that already and will continue with our mission at national level”*

*“We keep collaborating with some WP participants on these themes, maybe extending them to other countries”*

*“why not”*

*“Yes”*

**Comments on ‘Advocacy for the ALICE RAP Mission in my country/region’**

*“Again I support this and think it is important”*

*“again, speaking of an ALICE RAP Mission of an evidence-based approach is a totally vested concept.”*

*"Already in progress"*

*"I do not want to be involved in advocacy for any institution/ issues - I wish to be free to challenge all ideas"*

*"I do this anyway, irrespective of ALICE RAP"*

*"I will endorse any such initiative that I consider unbiased and reasonable"*

*"in particular in regional and national prevention plan"*

*"My institution has not a formal role in Addictions area"*

*"-that's our long-term mission"*

*"This is realistic for me and do not need much resources because I am working in the addiction field on regional level."*

*"Unfortunately, it all depends on funding, no money no work..."*

*"While this is something I believe in, I feel my role as a scientist is in the generation and dissemination of evidence, not policy advocacy."*

**Comments on 'Establish a formal organisation to continue on the path of ALICE RAP'**

*"A formal structure can provide identity, clear mission and emulation."*

*"As Vice President in [deleted], I have the mandate to deal with EU level to support research and actions in the field of addiction"*

*"I don't think I am in a position to do this, but I am happy to participate with others who are"*

*"My resources are very limited to support such organization, but would support them as much as I can."*

*"not applicable in my case"*

*"This could be a good idea - certainly interesting"*

*"Unfortunately, it all depends on funding, no money no work..."*

*"yes, why not, if some scientists that are capable of being self-reflexive are included."*

**Comments on 'Write research funding applications for follow-up to ALICE RAP'**

*"I am always applying for research funds, but outside the EU"*

*"I do participate in some applications for the gambling book"*

*"I have few papers on this theme. It is needed a very consistent CV as person and organisation in order to succeed."*

*"I would support this but only on a limited level with regard to my resources"*

*"not applicable in my case"*

*"Practically impossible not to be involved in this"*

*"This is an important area for common work"*

*"Unfortunately, it all depends on funding, no money no work.."*

*"Yes"*

*"yes of course"*

*"Yes, surely for smaller area"*

*"Yes, there is more to be done on the work I did as part of Alice Rap"*

**Comments on 'Write scientific papers using ALICE RAP data'**

*"already engaged in the production of a scientific paper on preliminary WP results"*

*"I am not an active member of ALICE RAP, and don't have access to data"*

*"I can be co-author if I will be invited or if I can apply for data."*

*"If invited to do so, I would be prepared to participate as co-author in papers dealing with psychiatric aspects of Addiction"*

*"In general interested in writing papers, but it depends on the topics."*

*"Not for lack of will but rather of opportunities or access to data"*

*"Perhaps"*

*"Same as above"*

*"see above"*

*"Unfortunately, it all depends on funding, no money no work.."*

*"Yes, for sure"*

*"Yes, I hope to do this"*

*"yes."*

**Comments on 'I have the possibility to propose improvements & new ideas at any level of working in ALICE RAP (WP, Area or project as a whole)'**

*"(Many of the questions were not applicable)"*

*"absolutely"*

*"I am only a 'data slave' and thus have not been involved at all other than to deliver data to my work package. Thus, all of these questions are completely irrelevant for me."*

*"I felt that I am treated with respect and consideration and my opinions were"*

considered.”

*“I made good experiences with regard to this point”*

*“I think the categories above are poor - they are not meaningful for some statements”*

*“Improvements can be proposed but do not necessarily get taken on board”*

*“Many of these questions do not apply to me and the response options do not relate to the questions. I am not sure what I am saying in completing it.”*

*“So far, I have done this through questionnaires but I have never expressed this in an active discussion or after being asked by an ALICE RAP-member”*

*“to all the below, my involvement in Alice Rap has been virtually non-existent because the money initially earmarked for this was spent on other things, so I cannot answer other than, effectively, NA”*

*“Yes”*

**Comments on ‘Plenary ALICE RAP meetings have not been effective’**

*“?”*

*“I did not participate.”*

*“I think they have, perhaps some smaller meetings with specific colleagues would have been useful too.”*

*“I think this varies, but most of the meetings were effective until now.”*

*“Not enough space for deep discussions and possibilities for different voices to be heard”*

*“These have been effective, however I personally feel like the integration of results/expertise and opinion and further discussions are missing or not frequent enough. When there are presentations about policy related issues, it seems like members from other areas cannot always understand exactly how the research results impact policy (and also the politics behind policy making in general: what are (or should they be based on)) or are just not interested and are not present, more because of lack of involvement and failure to see the relevance of these encounters”*

**Comments on ‘There is a clear task distribution among ALICE RAP scientists within the Area that I mostly contribute to’**

*“NA”*

*“The tasks were very clear and it was provided support for fulfilling them.”*

*“Who needs do to what is clear, but many don't do their work”*

*“yes”*

*“Yes”*

**Comments on 'ALICE RAP communications from the coordinating team are infrequent and/or unclear'**

*"I don't agree, I am happy with the coordinating team's communication"*

*"The communication was clear and frequent."*

*"The negative framing of this question makes it a bit difficult to select a response category. I think the communications are frequent enough and clear"*

**Comments on 'The work schedule for the ALICE RAP tasks I am involved in is clear'**

*"I find a slight lack of concretion and feel that specific tasks and work are not distributed and planned with sufficient time to be able to meet deadlines"*

*"It was always clear."*

*"NA"*

*"not quite clear"*

*"Yes, mostly"*

**Comments on 'ALICE RAP's leadership by the coordinating team has been too diffuse'**

*"I could not say that."*

*"no"*

*"No"*

**Comments on 'ALICE RAP has a shared Mission that has meaning for my ALICE RAP work'**

*"Of course."*

*"Yes"*

**Comments on 'In ALICE RAP, too much power is concentrated in too few people'**

*"I don't agree"*

*"I feel sometimes that only ALICE RAP members who have received the grant-money are contacted and properly referred too, while other Area members are left a bit in the background, while these members are (not always the case though) carrying out the 'heavy' work. I think that the whole team (including ALL members within an area) should be addressed equally. "The whole is more than the sum of its parts"*

*"I had not this impression. Anyway I have no problem if the power belongs to the highest expertise."*

**Comments on 'There is satisfactory communication within Work Packages'**

*"Area leaders should have played a more active role supervising the work of their areas"*

*and WPs and promoting more synergies between WPs”*

*“but not so much BETWEEN work packages”*

*“I think that there is just not enough communication between Areas in general (or work packages). This does not mean that the communication is not satisfactory though.”*

*“NA”*

*“Sometimes this has been difficult”*

*“Undoubtedly.”*

**Comments on ‘ALICE RAP as a whole has too many elements & is too complex’**

*“I think this is the main problem and the main source of difficulties within of ALICE RAP.”*

*“Indeed, from an external perspective. The amount of information and inputs are amazing - may be too much?”*

*“Sometimes these features are considered signs of a good quality.”*

*“strength and a weakness - a network rather than a partnership”*

*“That is not my experience”*

*“There are a lot of elements yes, but these are not too complex if enough time is invested in this. There just needs to be a clear structure and overview of elements involved, that can be divided into smaller pieces/responsibilities and later brought back together.”*

*“True, indeed.”*

**Comments on ‘ALICE RAP as a whole has satisfactory problem-solving capacity & routines’**

*“I think so.”*

*“I was not clear what problem solving capacity and routines meant. I replied on the basis that the coordinating team are responsive and helpful (and willing to support the resolution of problems and disagreements) when ALICE RAP participants encounter problems,”*

*“yes”*

**Comments on ‘My scientific expectations are being met by ALICE RAP’**

*“yes”*

*“Yes.”*

**Comments on ‘ALICE RAP is too dominated by non-science factors’**

*“No”*

*“Not clear for me.”*



**Comments on 'Others in ALICE RAP show interest in my work'**

*"Some do, but not everyone. But that is okay!"*

*"We had a subcontract. My opinion was asked for policy papers."*

**Comments on 'My attempts to collaborate across Areas have not been well received'**

*"I don't agree with this"*

*"The working atmosphere and the communication were very good."*

**Comments on 'ALICE RAP as a whole has sufficient scientific expertise'**

*"This was clear from beginning."*

*"Yes"*

**Comments on 'There is satisfactory communication within Areas'**

*"Definitively."*

*"I think that there is just not enough communication between Areas in general (or work packages). This does not mean that the communication is not satisfactory though."*

*"NA"*

*"sometimes, but this is often a challenge when working with such busy people"*

*"The main (internal) drawback of such a huge program"*

**Comments on 'My work is so specialised that I do not need ALICE RAP'**

*"My work is specialised but is equally related to addiction as other areas that are not (or do not seem) specialised. Just the 'weights' of the related factors need to be determined and factors must be related with each other to also understand how these factors interact (and not only knowing which factors are involved)"*

*"No, I want to make a contribution; my work supports that of others and vice versa"*

*"Not at all."*

**Comments on 'I have sufficient financial resources to undertake my ALICE RAP work'**

*"I had to leave ALICE RAP because of the late payment of my salary (for months), including the poor working conditions as a freelancer, without any job security."*

*"I worked on my office computer on a database that we have."*

*"NA"*

*"NA - but I wasn't allowed to leave blank. but disregard my answer – it's not relevant."*

*"No, I haven't really and I have worked a fair bit more than I had intended"*

*"Resources have been a significant problem, but further research collaborations may help to develop some work carried out in ALICE RAP"*

**Comments on 'I feel welcome to offer my ideas about reframing addiction'**

*"again, not clear if they will be taken up or considered"*

*"I do feel this, but it would be nice if this is encouraged and stimulated more."*

*"Of course."*

*"yes most colleagues are welcoming and open minded"*

**Comments on 'I disagree with ALICE RAP's ideas about reframing addictions'**

*"But what exactly is it?"*

*"I agree strongly with ALICE RAP's public health perspective"*

*"I think this is an elementary factor. From my point of view there were not enough discussions or exchange of ideas about this topic."*

*"no I do agree"*

*"Not true. I would like to more intensively reframed."*

*"This is a silly question and impossible to answer properly with the given categories. My answer is meaningless"*

**Comments on 'ALICE RAP is achieving significant synergy in addictions research'**

*"Definitely hope so but only future will tell"*

*"I hope."*

*"I think so"*

*"I think that its popularity (and existence) and relevancy are emerging"*

*"yes, indeed. one of its most important functions."*

## **Futures II**

### **Participants**

The FUTURES II sample frame was provided by the Coordinating team based in Barcelona, containing the email addresses of all partners as of mid-2015. The sample frame contained 178 names. Ninety-four surveys were returned (53% return rate), of which 73 were completed survey forms (effective response rate = 41%). There were 21 partly completed and unusable forms among the submissions. During the course of data collection, two reminders were sent.

## Methods

The same online questionnaire that was used in Futures I was used in Futures II. The FUTURES II survey was distributed online during September 2015.

## Results

In this report of Futures II findings, we take a somewhat different perspective than in the Futures I analysis, now focusing on the detailed response distributions for each item in each of the Model's elements: inputs, throughputs, and outputs, and on all the qualitative comments that the respondents offered. For each item, the quantitative and the qualitative data are presented together, to facilitate the reader's own joint analysis. The quantitative analyses are presented as sex-specific analyses, even if the Model does not include sex/sex as a factor in the functioning of collaborative projects. Where sex differences are apparent in the present data, they are commented on in Discussion. The qualitative data are not presented sex-specific.

Figures 19-54 shows the results for each of the 36 items used to indicate the nine measures (scales) in the Bergen Model of Collaborative Functioning. The scales that are composed of sub-sets of the 36 items were presented in the Futures I section, above. Futures I and II results are kept separate, and analysed from two different and complementary perspectives. This is in accordance with the fact that Futures I and Futures II are two different studies, with different samples, even if data collection was done using the same online survey instrument.

## Discussion

Taken together, the quantitative and qualitative findings of Futures I and II support the prediction of the Bergen Model of Collaborative Functioning that input and throughput factors are important to the attainment of synergy. Partners who had positive attitudes towards future engagement with ALICE RAP tended to have positive impressions of the project's communications, which is a key throughput (process) factor in the Model.

In preliminary analyses, other factors in the Model were significantly related to attitude about continuity, but only communications remained a significant correlate in multivariate analysis. Participates were given the opportunity to express their impressions about ALICE RAP communications, and these selections from the data are representative of their sentiments, both positive and negative:

- "...I am happy with the coordinating team's communication"
- "The communication was clear and frequent."
- "...I think the communications are frequent enough and clear"
- "Area leaders should have played a more active role supervising the work of their areas and WPs and promoting more synergies between WPs"
- "but not so much BETWEEN work packages"

- “I think that there is just not enough communication between Areas in general (or work packages). This does not mean that the communication is not satisfactory though.”
- “Sometimes this has been difficult”

As important as good communications may be to the stimulation of engagement, in these data the communications variables accounted for just a quarter of the variance in the future engagement measure. Therefore, a large proportion of variance in the outcome measure was not accounted for by the data as fitted to the Model. There are many plausible complementary and rival explanations for why the data fit the model as they do. This analysis, however, seems to present good evidence that regardless of other factors, leaders of complex TDR projects like ALICE RAP would be well advised to expend considerable time and energy on shaping a good communications culture.

Turning to the other synergy construct, assessed with the ALICE RAP synergy measure, the results are much more robust. An input variable – mission – and a throughput variable – collaborative atmosphere – were significantly related to the perception of synergy. Together they account for more than half the variance in the synergy measure, which is a quite robust finding in a social science analysis. Here is what partners had to say about the collaborative atmosphere:

- Comments on ‘Others in ALICE RAP show interest in my work’  
*“Some do, but not everyone. But that is okay!”*  
*“We had a subcontract. My opinion was asked for policy papers.”*
- Comments on ‘My attempts to collaborate across Areas have not been well received’  
*“I don't agree with this”*  
*“The working atmosphere and the communication were very good.”*
- Comments on ‘My work is so specialised that I do not need ALICE RAP’  
*“My work is specialised but is equally related to addiction as other areas that are not (or do not seem) specialised. Just the ‘weights’ of the related factors need to be determined and factors must be related with each other to also understand how these factors interact (and not only knowing which factors are involved)”*  
*“No, I want to make a contribution; my work supports that of others and vice versa”*  
*“Not at all.”*
- Comments on ‘I feel welcome to offer my ideas about reframing addiction’  
*“again, not clear if they will be taken up or considered”*  
*“I do feel this, but it would be nice if this is encouraged and stimulated more.”*

*“Of course.”*

*“yes most colleagues are welcoming and open minded”*

Regardless of the positive or negative wording of the items making up the synergy scale, partners who chose to write comments chose mostly to emphasise positive aspects of their experience in ALICE RAP.

In the measurement of ALICE RAP synergy, the data show consistently that a large majority of respondents perceived the project to have synergistic effects. There were interesting sex differences. Males were more than twice as likely as females to have experienced synergy frequently, but males were far more likely to be critical of the scientific quality of ALICE RAP.

An important point is that for the synergy items, as well as for all of the items analysed in Futures II, the full range of response alternatives was used. This increases the face validity of the results. For example, virtually all ALICE RAP partners were aware that the project was intended to produce synergy, yet meaningful numbers of them indicated experiencing less than optimal levels of synergy. This adds credibility to the conclusion that the experience of synergy was normative in ALICE RAP, to the degree that the Futures II sample is representative. There is also consistency in the findings on synergy in Futures I and Futures II.

There was more moderate evidence for synergy in the other synergy construct – continuity – as expressed by respondents’ intentions to participate in ALICE RAP-related activities after the project is completed. In Futures I, the continuity scale was close to normally distributed. In Futures II, the majority of respondents indicated intentions to participate by endorsing and supporting activities, or playing a modest role. For the more active types of future participation, women were more likely than were men to indicate the possibility of extensive futures participation. This was the case for connecting to networks with like interests, writing research applications, and writing papers. Men, on the other hand, were more likely to intend active participation in more general activities like endorsement and advocacy.

## Chapter 9 Maintaining momentum Sub-study

### Aim

This Sub-study focused on the outputs element of the BMCF (Figure 1), aiming to ascertain the degree of synergy regenerated by ALICE RAP (indicated by partners' intentions to keep aspects of the project underway after the EU funding period).

This sub-study aligned with the BMCF's output element, with a focus on possible synergy effects.

### Participants

Participants were 23 persons who were present in the auditorium at the time of data collection, and who spoke during the guided discussion. The number of people in the auditorium was not ascertained, so the active participation rate (speaking) is not known.

### Methods

At the 4<sup>th</sup> plenary meeting of Alice Rap in Amsterdam (12-14 May 2014), the last plenary session was devoted to the topic "Maintaining the momentum: planning the continuing project work." The discussion of this topic used the 'fish bowl' technique, modified slightly to make place in the centre of the discussion arena for three speakers and substituting the usual rapporteur with audio recording and transcription (see appendix). The aim was explained by the Project Coordinator, Toni Gual at the start of the session:

*"...this is a particular opportunity to keep on trying to have an egalitarian approach and to keep on trying to have a very democratic approach and to get information from everybody. It would be... easy to go from the coordination team and propose what we want to do, but we don't think this will work. We've [ALICE RAP partners] been working now for three years. We very much think that if anything has to happen when the project finishes, it should come from all of us and so we thought that this technique would help to get input from everybody. That should be the basis for moving forward."*

The entire session was tape recorded and notes were also taken. The audiotape was transcribed and analysed, with the assistance of notes. A thematic network analysis of the data was undertaken.

### Results

Figure 55 summarises the analysis of the transcript, organised by emergent themes (not by the flow of the discussion). However, it was the case that research ideas tended to be discussed earlier, and network ideas toward the end of the session. It is noted that some important comments are not reflected in the analysis, because they were judged to be only

indirectly related to the main discussion topic.

## Discussion

As the Figure shows, two main themes arose, research and networks. Five specific ideas were identified related to possible future social science research, seemingly with an emphasis on descriptive aspects (not intervention research). The five topics shown are listed in arbitrary order.

The second research stream that received attention was related to intervention for policy enhancement, for which three highly interrelated topics were identified – again, these are listed in Figure 1 in arbitrary order. Together, eight social science research topics received attention, while no bio-medical topics were suggested.

The other emergent theme was networks, loosely divided into ideas related to less and more formal networks. Five network ideas received attention, with various purposes: the gathering of vested interests; advocacy; building transdisciplinary science capacity across addiction arenas and micro to macro levels of systems; research.

The findings suggest at least some degree of interest in continued ALICE RAP work. Interestingly, no participant suggested just letting ALICE RAP fade away.

## Lessons for European TDR

- The use of participatory process evaluation as an integral part of a TDR project is feasible and valuable. Science and non-science partners will collaborate in self-evaluation. It must be made clear at the outset that partners are co-owners of the evaluation. In signing on for the TDR project, partners should agree to devote some time and energy to producing evaluation data, to discussing evaluation findings, and to making adjustments in the project to help improve partnership functioning.
- TDR leaders should devote time and energy early in the project to discussions about the vision, the mission and the core values the TDR project wishes to embrace. This is to promote a collaborative working atmosphere, which might otherwise be weakened by each partner's focus on her/his own responsibilities in the project. Some partners might object that this is a distraction of time away from doing the science. In response, TDR leaders should demonstrate the importance of such discussions by their own enthusiastic participation. A TDR project should seriously consider developing formal Vision, Mission and Values Statements, to unify the TDR team and to impart unity to the research objectives and the research questions.
- TDR leaders need to shape a good communications culture. TDR typically has several leaders at multiple levels. A TDR project should offer a clear description of responsibilities so that partners know 'who to contact about what'. Partners need to feel comfortable raising

sensitive issues in a safe and supportive atmosphere, to avoid a 'sweeping trouble under the rug' culture. Leadership style should balance firmness and clear direction on the one hand, with openness and a consultative style on the other hand.

- TDR management should be alert to, monitor, and manage challenges related to diversity in the TDR team. This might take several forms, including possible dominance by one or several disciplines over the others, and dominance of native English language speakers over the others.
- Meetings of TDR partners should maximize time for partners to participate actively, and keep briefing-type plenary sessions to a bare minimum. On-site computer-mediated communication in plenary sessions is one method to involve large numbers of partners in focused discussions.
- It is important to monitor acts of collaboration within and across work areas in a TDR project. This will illuminate good practices and tendencies to isolation, in time for action to reinforce the former and prevent the latter.
- Four collaboration factors may be of tantamount importance in fostering a successful TDR project:
  - Clear leadership and lines of responsibility
  - Jointly-developed, well-articulated Vision, Mission and Values
  - A clear and open communications culture
  - A supportive collaborative atmosphere characterised by partners
    - Having and showing real interests in other partners' work
    - Responding affirmatively to other partners' overtures for collaboration
    - Feeling welcome to offer ideas about how to do the TDR science, and about ways to help the project function well as a social experience.
- All the factors noted above require active management and continual vigilance on the part of TDR leadership. One way to help ensure this is to involve the TDR evaluation specialists in the project management team. This is a participatory, highly engaged, internal approach to process evaluation, distinct from more traditional outcome evaluation methods with external evaluators. Participative process evaluation lives in harmony with external outcome evaluation.



## Tables

Table 1. Chronology of sub-studies (green) in the context of major ALICE RAP activities (blue).

<b>Event</b>	<b>Place</b>	<b>Dates</b>	<b>Comments</b>
Virtual Steering Group Meeting	Teleconference	16 December 2010	WP21 facilitated a session on 'Supporting partnerships across project'.
1 <sup>st</sup> Steering Group Meeting	Oxford	5-6 April 2011	WP21 facilitated a session on 'Promoting networking and partnership building – brainstorm and alignment of ideas (Between ourselves, Within areas, Across areas Within project as a whole, Designation of ambassadors). The Bergen Model of Collaborative Functioning (BMCF) was introduced as was the collaborative nature of the evaluation work of WP21.
1 <sup>st</sup> Partners' Meeting	Barcelona	23-27 May 2011	WP21 facilitated a plenary session on mission and values, including data collection using computer-mediated communication (CMC) for the Mission and Values Study.
Mission and Values Sub-study	--	May 2011	The Mission and Values Dialogue Study was analysed, completed and reported, and also published in a peer review article. Its focus was on a key collaboration input (mission/values) as specified by the BMCF. This helped stimulate the development of AR's Vision and Mission Statements.

Leadership Sub-study	--	June 2011	WP and Area and Science Board leaders were interviewed via telephone using a structured interview guide with questions tied directly to the input and throughput elements of the BMCF.
2 <sup>nd</sup> Steering Group Meeting	Mallorca	28 Feb – 1 March 2012	WP21 did not participate in this meeting.
2 <sup>nd</sup> Partners' meeting	Newcastle	15-18 May 2012	WP21 facilitated a session on ALICE RAP management, and a session on the link between science and policy, using CMC for data collection (the Science and Policy Dialogue Study).
Science and Policy Dialogue Sub-study	--	June 2013	The Science and Policy Dialogue Study data were analysed and reported. The findings suggest that we perhaps need to develop a differentiated strategy for stakeholder involvement, tailored to particular aspects of addiction, to country or community levels of interest, and to the different stages of the project as it progresses.
3 <sup>rd</sup> Steering Group Meeting	Barcelona	5-7 February 2013	WP21 facilitated a session on evaluation and project management issues, drawing on results from Mission and Values Study, the Leadership Study and the Science and Policy Dialogue Study.
3 <sup>rd</sup> Partners'	Barcelona	23-25 April 2013	WP21 facilitated a session on trans-

meeting			disciplinary research as a model for understanding addictions, and conducted data collection for the Research Orientation Study.
Research Orientation Sub-study 2013	--	April 2013	This was a study of the collaborative research orientations of ALICE RAP scientists undertaken two years after the start of the project.
4 <sup>th</sup> Steering Group Meeting	teleconference	8 January 2014	WP21 participated in discussions planning the next Partners' Meeting, leading to decisions about continued evaluation activities.
4 <sup>th</sup> Partners' Meeting	Amsterdam	12-14 May 2014	WP21 facilitated a session on 'What we are about: Generating the core messages of ALICE RAP'. This included data collection for the Fishbowl Futures Study, a guided discussion about possible futures following ALICE RAP's completion. The session was tape recorded and transcribed.
Collaboration Sub-study	--	June 2014	To provide the project with feedback about the extent of inter-Work Package collaboration at about the mid-way point of the project, an online survey was conducted during June 2014. The survey was sent to all partners on the ALICE RAP mailing list.
Futures Sub-study I	--	September 2014	This was originally to be conducted using leadership interviews, but a

			<p>poll of the leadership showed a very strong reference for an online survey. Since this could be done at no extra cost with all AR scientists, the study was expanded to include all of AR and it was conducted online. The main finding is of a high level of collaboration facilitated by ALICE RAP, under the assumption that relatively little collaboration amongst many of the ALICE RAP partners would have been manifest without a project like ALICE RAP as a stimulus.</p>
Maintaining Momentum Sub-study	--	October 2014	<p>The Maintaining Momentum Study was analysed, completed and reported. The findings suggest at least some degree of interest in continued ALICE RAP work; no participant suggested just letting ALICE RAP fade away. It seems a key question is this: what can ALICE RAP do in the period before the project ends, to foster a continuation of the work in some form or another?</p>
5 <sup>th</sup> Steering Group Meeting	Barcelona	3-4 February 2015	<p>WP21 reported on the results of the ALICE RAP Futures Study and the Fishbowl Maintaining Momentum Study.</p>
Final Partners' Meeting	Lisbon	22 September 2015	<p>WP21 conducted an evaluation of the meeting.</p>

Research Orientation Sub-study 2015	--	22 September 2015	This was the second round of data collection for the Research Orientation Study.
Futures Sub-study II		August/September 2015	This was the second round of online data collection for the Futures study.

Table 2. Research Orientation Scale.

Please indicate how strongly you agree or disagree with each of the following statements:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
1. I tend to be more productive working on my own research projects than working as a member of a collaborative research team.		•	•	•	•
2. There is so much work to be done within my field that it is important to focus my research efforts with others in my own discipline.	•	•	•	•	•
3. The research questions I am often interested in generally do not warrant collaboration from other disciplines.	•	•	•	•	•
4. While working on a research project within my discipline, I sometimes feel it is important to seek the perspective of other disciplines when trying to answer particular parts of my research question.	•	•	•	•	•
5. Although I rely primarily on knowledge from my primary field of interest, I usually work interactively with colleagues from other disciplines to address a research problem.	•	•	•	•	•
6. The benefits of collaboration among scientists from different disciplines usually outweigh the inconveniences and costs of such work.	•	•	•	•	•
7. In my collaborations with others I integrate research methods from different disciplines.	•	•	•	•	•
8. In my own work, I typically incorporate perspectives from disciplinary orientations that are different from my own.	•	•	•	•	•
9. Although I was trained in a particular discipline, I devote much of my time to understanding other disciplines in order to inform my research.	•	•	•	•	•
10. In my collaborations with others I integrate theories and models from different disciplines.	•	•	•	•	•

Table 3. Characteristics of the Research Orientation Sub-study samples.

	2013	2015
	n (%)	n (%)
Female	29 (53)	22 (58)
44 & younger	20 (36)	11 (29)
45 & older	9 (16)	11 (29)
Male	26 (47)	16 (42)
44 & younger	10 (18)	5 (13)
45 & older	16 (29)	11 (29)
Missing		4
44 & younger		2
45 & older		2
Total	55	42
Adjusted total	55	38



Table 4. Distribution of the sum score, Research Orientation Scale, 2013.

Raw score total	Frequency	Percent	Valid Percent	Cumulative Percent
5	1	1.7	1.7	1.7
8	4	6.8	6.8	8.5
10	1	1.7	1.7	10.2
11	3	5.1	5.1	15.3
12	6	10.2	10.2	25.4
13	6	10.2	10.2	35.6
14	2	3.4	3.4	39.0
15	7	11.9	11.9	50.8
16	7	11.9	11.9	62.7
17	7	11.9	11.9	74.6
18	7	11.9	11.9	86.4
19	3	5.1	5.1	91.5
20	5	8.5	8.5	100.0
Total	59	100.0	100.0	

Table 5. Inter-correlations among the 10 items of the research Orientation Scale, 2013.<sup>1,2,3</sup>

	2	3	4	5	6	7	8	9	10
1	.33	-.04	-.06	-.02	.10	.13	-.23	-.41	-.34
2		.05	-.21	-.25	-.16	.28	-.09	-.12	-.20
3			.13	.18	.06	-.15	.21	.21	.17
4				.31	.17	-.03	.25	.25	.47
5					.18	.09	.50	.32	.54
6						-.15	.11	-.07	-.02
7							.03	.13	.11
8								.57	.45
9									.64

<sup>1</sup> The numbers in the first row and the first column correspond to the Research Orientation Scale item as numbers in Table Q.

<sup>2</sup> The grey-shaded cells show inter-correlations for the three unidisciplinarity items, the single green-shaded cell shows the inter correlation for the two multidisciplinary items, and the 10 blue-shaded cells show the inter-correlations for the five inter/transdisciplinary items.

<sup>3</sup> Correlation coefficients significant at  $p < 0.05$  are indicated in bold.

Table 6. Proportions of men and women agreeing/disagreeing with the items of the Research Orientation Scale, 2013.

Research Orientation Scale items*	Males		Females		Missing n (% of 59)
	Agree <sup>1</sup> n (%) <sup>2</sup>	Disagree n (%)	Agree n (%)	Disagree n (%)	
	I tend to be more productive working on own research projects than working as a member of a collaborative research team	4 (15.4)	22 (84.6)	9 (31.0)	
There is so much work to be done within my field that it is important to focus my research efforts with others in my own discipline	10 (38.5)	16 (61.5)	13 (46.4)	15 (53.6)	5 (8.5)
The research questions I am often interested in generally do not warrant collaboration from other disciplines	1 (3.8)	25 (96.2)	3 (10.3)	26 (89.7)	4 (6.8)
While working on a research project within my discipline, I sometimes feel it is important to seek the perspective of other disciplines when trying to answer particular parts of my research question	23 (88.5)	3 (11.5)	25 (86.2)	4 (13.8)	4 (6.8)
Although I rely primarily on knowledge from my primary field of interest, I usually work interactively with colleagues from other disciplines to address a research problem	20 (76.9)	6 (32.1)	22 (75.9)	7 (24.1)	4 (6.8)
The benefits of collaboration among scientists from different disciplines usually outweigh the inconveniences and costs of such work	19 (73.1)	7 (26.9)	23 (79.3)	6 (20.7)	4 (6.8)
In my collaborations with others I integrate research methods from different disciplines	23 (88.5)	3 (11.5)	22 (76.9)	7 (24.1)	4 (6.8)
In my own work, I typically incorporate perspectives from disciplinary orientations that are different from my own	18 (69.2)	8 (30.8)	21 (72.4)	8 (27.6)	4 (6.8)
Although I was trained in a particular discipline, I devote much of my time to understanding other disciplines in order to inform my research	20 (76.9)	6 (23.1)	19 (65.5)	10 (34.5)	4 (6.8)
In my collaborations with others I integrate theories and models from other disciplines	21 (80.8)	5 (19.2)	22 (75.9)	7 (24.1)	4 (6.8)

<sup>1</sup> 'Agree' includes strongly agree and somewhat agree; 'Disagree' includes strongly disagree, somewhat disagree and neutral.

<sup>2</sup> % of valid responses

\* Items in **boldface** indicate a Chi square test significant at  $p < 0.05$ .

Table 7. Proportions of respondents younger than 45 years and 45 and older agreeing/disagreeing with the items of the Research Orientation Scale, 2013.

Research Orientation Scale items*	Younger than 45		45 and older		Missing
	Agree <sup>1</sup>	Disagree	Agree	Disagree	
	n (%) <sup>2</sup>	n (%)	n (%)	n (%)	
I tend to be more productive working on own research projects than working as a member of a collaborative research team	9 (30.0)	21 (70.0)	4 (14.3)	21 (85.7)	1 (1.7)
There is so much work to be done within my field that it is important to focus my research efforts with others in my own discipline	11 (37.9)	18 (62.1)	14 (50.0)	14 (50.0)	2 (3.4)
The research questions I am often interested in generally do not warrant collaboration from other disciplines	3 (10.0)	27 (90.0)	3 (10.7)	25 (89.3)	1 (1.7)
While working on a research project within my discipline, I sometimes feel it is important to seek the perspective of other disciplines when trying to answer particular parts of my research question	29 (96.7)	1 (3.3)	22 (78.6)	6 (21.4)	1 (1.7)
Although I rely primarily on knowledge from my primary field of interest, I usually work interactively with colleagues from other disciplines to address a research problem	22 (73.3)	8 (26.7)	23 (82.1)	5 (17.9)	1 (1.7)
The benefits of collaboration among scientists from different disciplines usually outweigh the inconveniences and costs of such work	24 (80.0)	6 (20.0)	20 (71.4)	8 (28.6)	1 (1.7)
In my collaborations with others I integrate research methods from different disciplines	24 (80.0)	6 (20.0)	24 (85.7)	4 (14.3)	1 (1.7)
In my own work, I typically incorporate perspectives from disciplinary orientations that are different from my own	22 (73.3)	8 (26.7)	20 (71.4)	8 (28.6)	1 (1.7)
Although I was trained in a particular discipline, I devote much of my time to understanding other disciplines in order to inform my research	21 (70.0)	9 (30.0)	21 (75.0)	7 (25.0)	1 (1.7)
In my collaborations with others I integrate theories and models from other disciplines	24 (80.0)	6 (20.0)	22 (78.6)	6 (21.4)	1 (1.7)

<sup>1</sup> 'Agree' includes strongly agree and somewhat agree; 'Disagree' includes strongly disagree, somewhat disagree and neutral.

<sup>2</sup> % of valid responses

\* Items in **boldface** indicate a Chi square test significant at  $p < 0.05$ .



Table 8. Proportions of biomedical scientists and social scientists agreeing/disagreeing with the items of the Research Orientation Scale, 2013.

Research Orientation Scale items*	Biomedical sciences		Social sciences		Missing
	Agree <sup>1</sup> n (%) <sup>2</sup>	Disagree n (%)	Agree n (%)	Disagree n (%)	
I tend to be more productive working on own research projects than working as a member of a collaborative research team	4 (26.7)	11 (73.3)	8 (20.5)	31 (79.5)	5 (8.5)
There is so much work to be done within my field that it is important to focus my research efforts with others in my own discipline	7 (46.7)	8 (63.3)	17 (44.7)	21 (55.3)	6 (10.2)
The research questions I am often interested in generally do not warrant collaboration from other disciplines	1 (6.7)	14 (93.3)	4 (10.3)	35 (89.7)	5 (8.5)
While working on a research project within my discipline, I sometimes feel it is important to seek the perspective of other disciplines when trying to answer particular parts of my research question	14 (93.3)	1 (6.7)	33 (84.6)	6 (15.4)	5 (8.5)
Although I rely primarily on knowledge from my primary field of interest, I usually work interactively with colleagues from other disciplines to address a research problem	12 (80.0)	3 (20.0)	30 (76.9)	9 (23.1)	5 (8.5)
<b>The benefits of collaboration among scientists from different disciplines usually outweigh the inconveniences and costs of such work</b>	8 (53.3)	7 (46.7)	32 (82.19)	7 (17.9)	5 (8.5)
In my collaborations with others I integrate research methods from different disciplines	13 (86.7)	2 (13.2)	32 (82.1)	7 (17.9)	5 (8.5)
In my own work, I typically incorporate perspectives from disciplinary orientations that are different from my own	9 (60.0)	6 (40.0)	30 (76.9)	9 (23.1)	5 (8.5)
Although I was trained in a particular discipline, I devote much of my time to understanding other disciplines in order to inform my research	10 (66.7)	5 (33.3)	29 (74.4)	10 (25.6)	5 (8.5)
In my collaborations with others I integrate theories and models from other disciplines	11 (73.3)	4 (26.7)	31 (79.5)	8 (20.5)	5 (8.5)

<sup>1</sup> 'Agree' includes strongly agree and somewhat agree; 'Disagree' includes strongly disagree, somewhat disagree and neutral.

<sup>2</sup> % of valid responses.

\* Items in **boldface** indicate a Chi square test significant at  $p < 0.05$ .

Table 9. FUTURES I – Descriptive statistics for the nine scales of the Bergen Model of Collaborative Functioning.

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Mission Scale	80	1	9	6,06	1,858	3,452	-,458	,269	,032	,532
People Scale	80	3	9	7,30	1,453	2,111	-,771	,269	,271	,532
Money Scale	80	0	3	1,59	1,099	1,207	-,111	,269	-1,295	,532
Collaborative Atmosphere Scale	80	2	15	9,99	2,721	7,405	-,675	,269	,524	,532
Leadership Scale	80	0	12	7,60	2,840	8,066	-,446	,269	-,165	,532
Communications Scale	80	0	12	8,17	2,841	8,070	-,675	,269	,023	,532
Roles and Structures Scale	80	3	18	11,06	3,469	12,034	-,479	,269	-,354	,532
Synergy Scale	80	0	9	6,03	2,074	4,303	-,619	,269	,146	,532
Continuity Scale	80	0	21	12,33	4,762	22,678	-,434	,269	-,163	,532
Valid N (listwise)	80									

Table 10. Regression analysis with the synergy measure as the dependent variable.

Predictors:	R	Adjusted R Square	Change Statistics		
			R Square Change	F Change	Sig. F Change
Mission	.670	.441	.448	63.402	.000
Collaboration	.749	.549	.112	19.603	.000

Table 11. Regression analysis with the continuity measure as the dependent variable.

Predictor:	R	Adjusted R Square	Change Statistics		
			R Square Change	F Change	Sig. F Change
Communication	.508	.249	.259	27.202	.000



## Figures

Figure 1. Bergen Model of Collaborative Functioning.

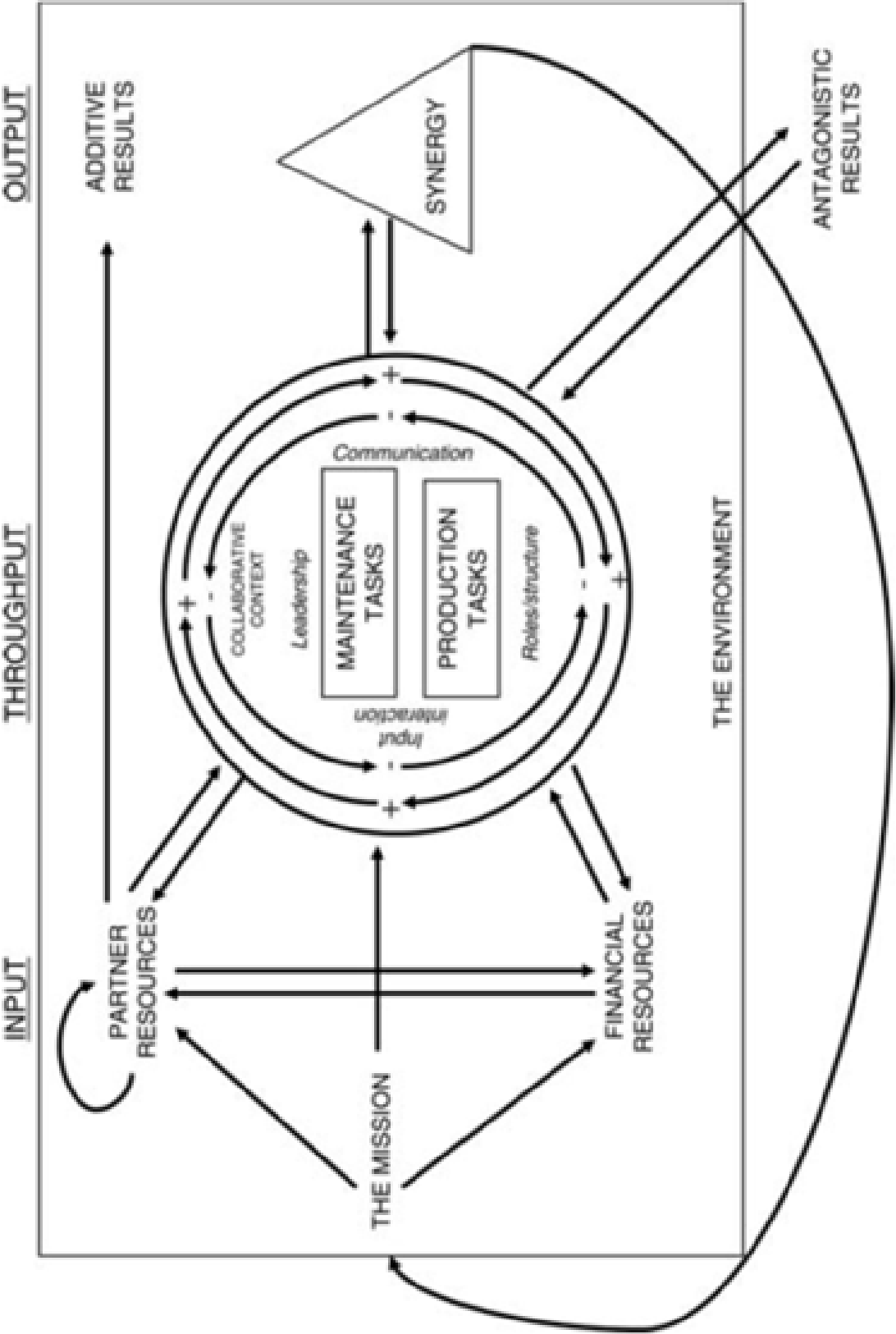


Figure 2. Quality framework developed by the Evaluation Network for Transdisciplinary Research.

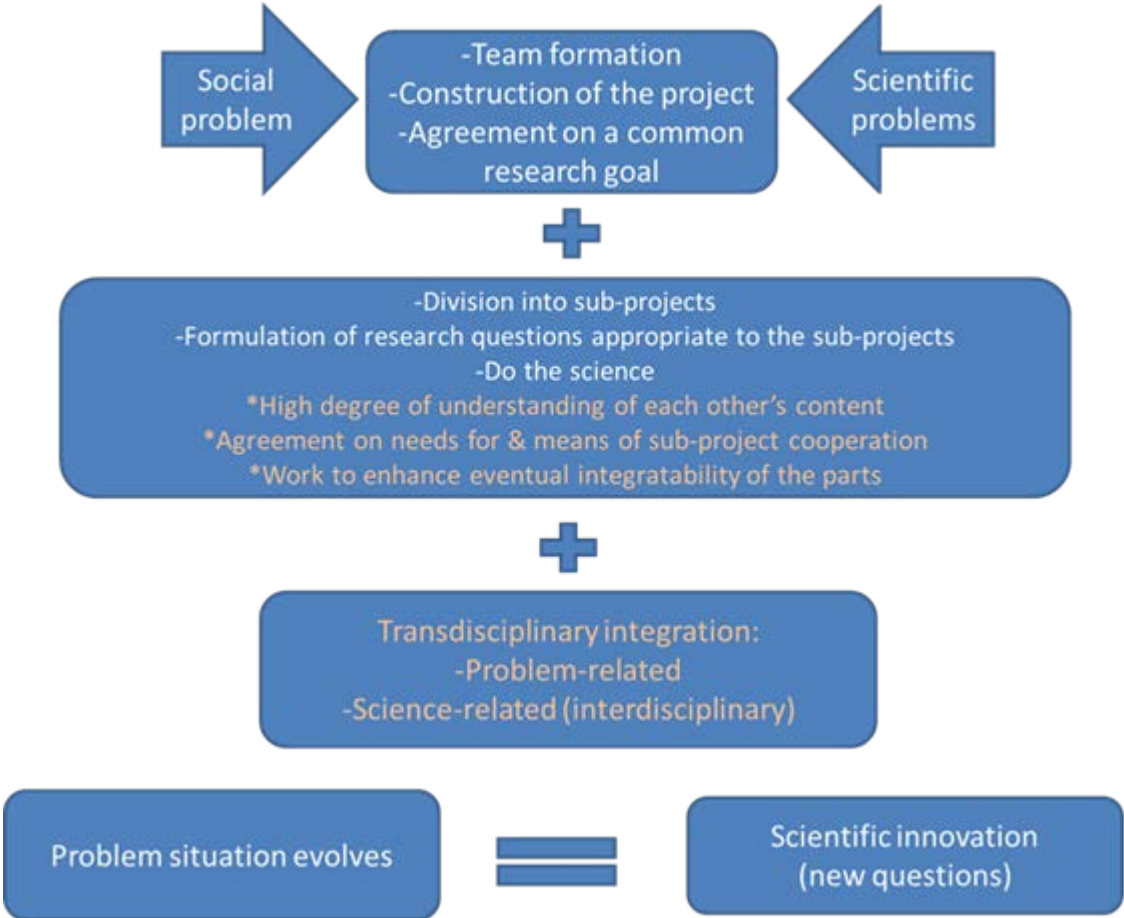


Figure 3. Joint distribution of the unidisciplinary proclivity items of the Research Orientation Scale, by scientific field, sex, and age, 2013.

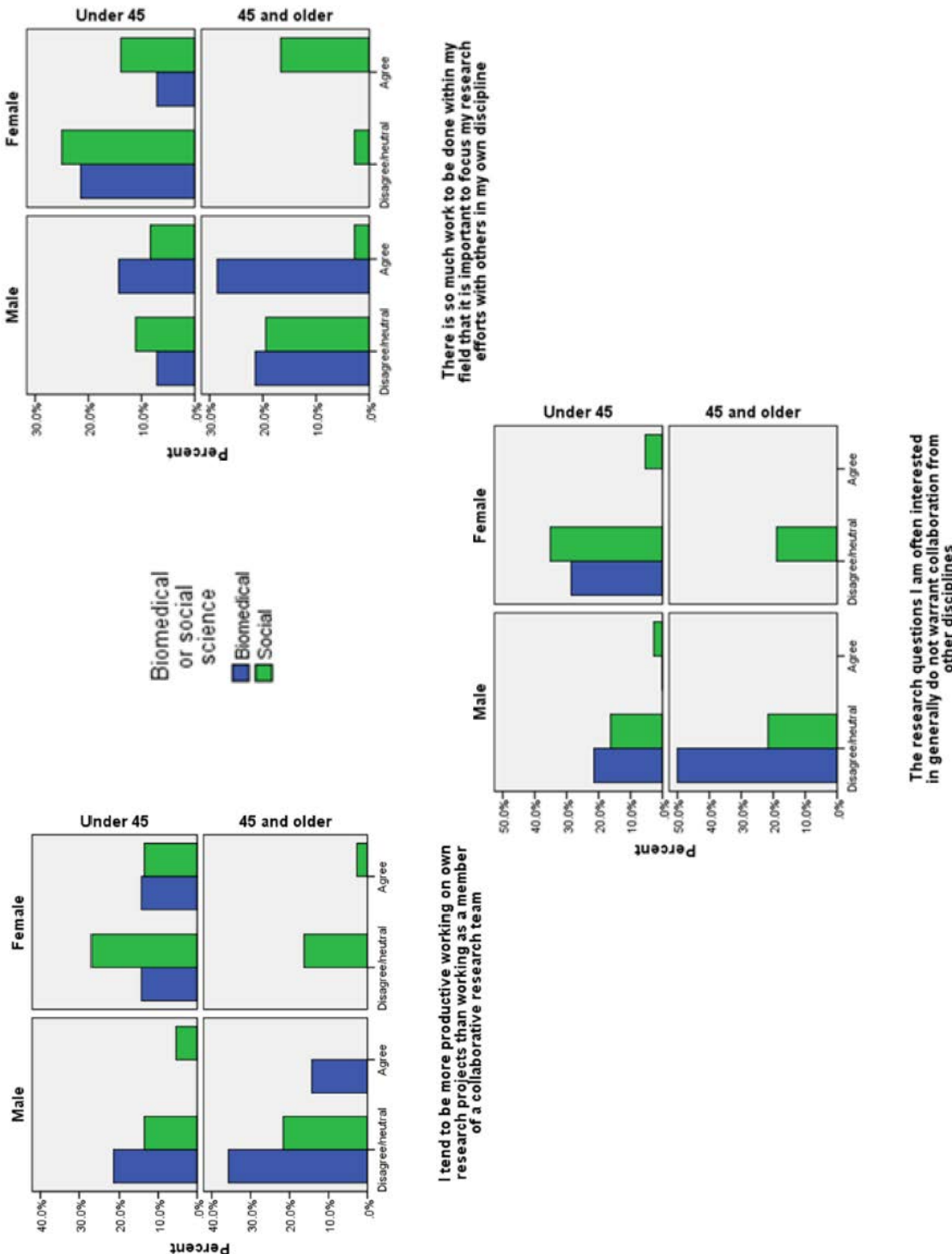
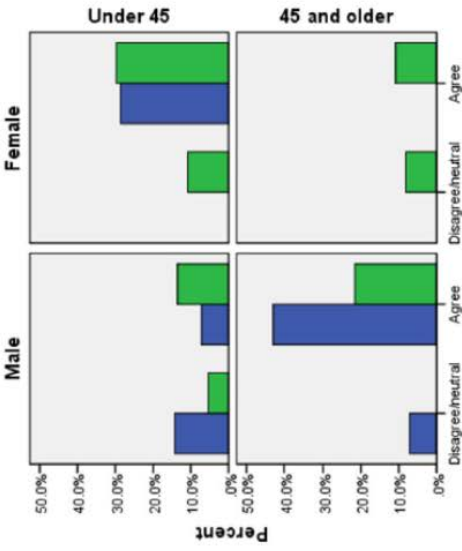
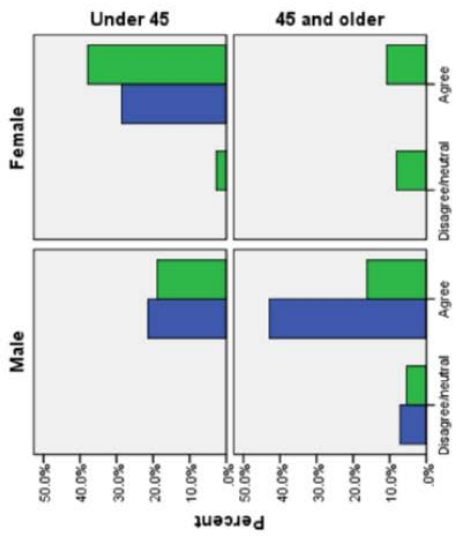


Figure 4. Joint distribution of the multidisciplinary proclivity items of the Research Orientation Scale, by scientific field, sex, and age, 2013.



Although I rely primarily on knowledge from my primary field of interest, I usually work interactively with colleagues from other disciplines to address a research problem



While working on a research project within my discipline, I sometimes feel it is important to seek the perspective of other disciplines when trying to answer particular parts of my research question

Figure 5. Joint distribution of the inter/transdisciplinary proclivity items of the Research Orientation Scale, by scientific field, sex, and age, 2013.

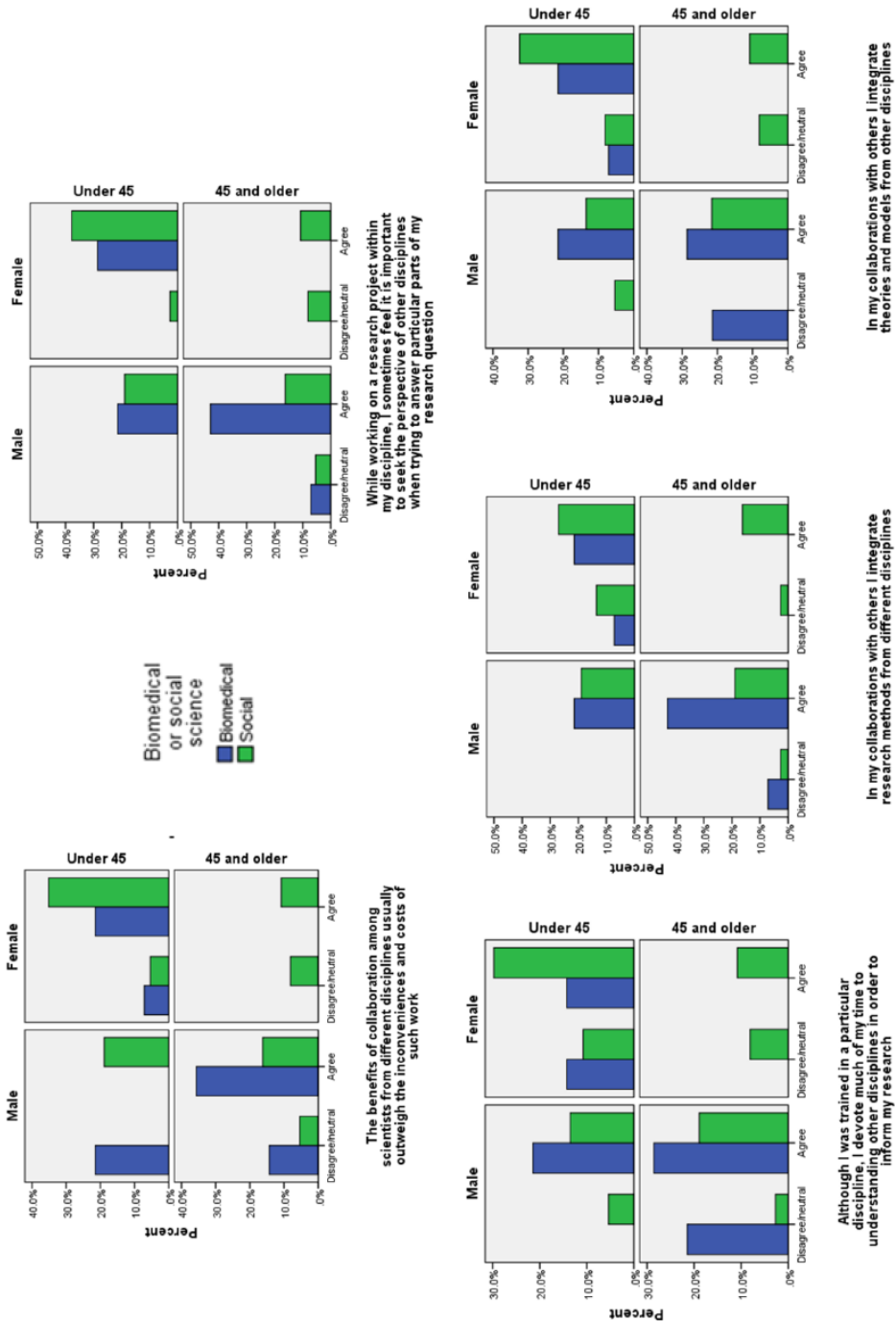


Figure 6. Sum score of the Research Orientation Scale items 4, 5, 8, 9 and 10, extracted by exploratory factor analysis as a single scale, 2013.

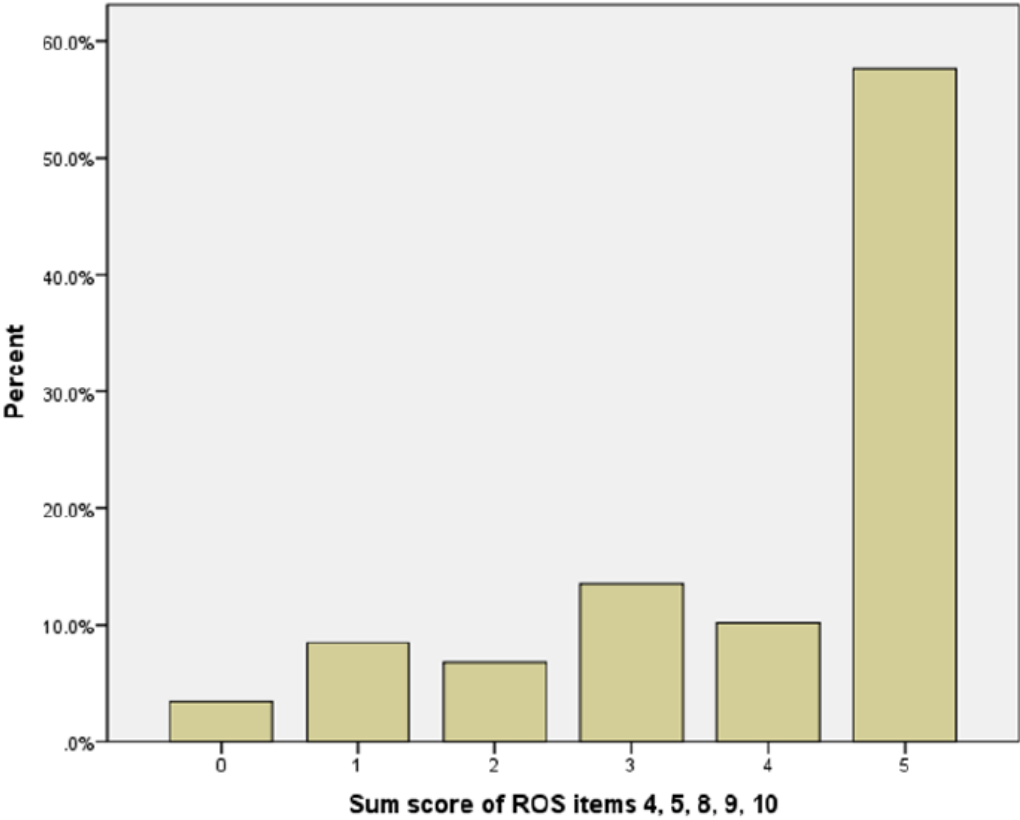


Figure 7. Research Orientation Scale score distribution by age and sex, Lisbon Partners' Meeting, 2015.

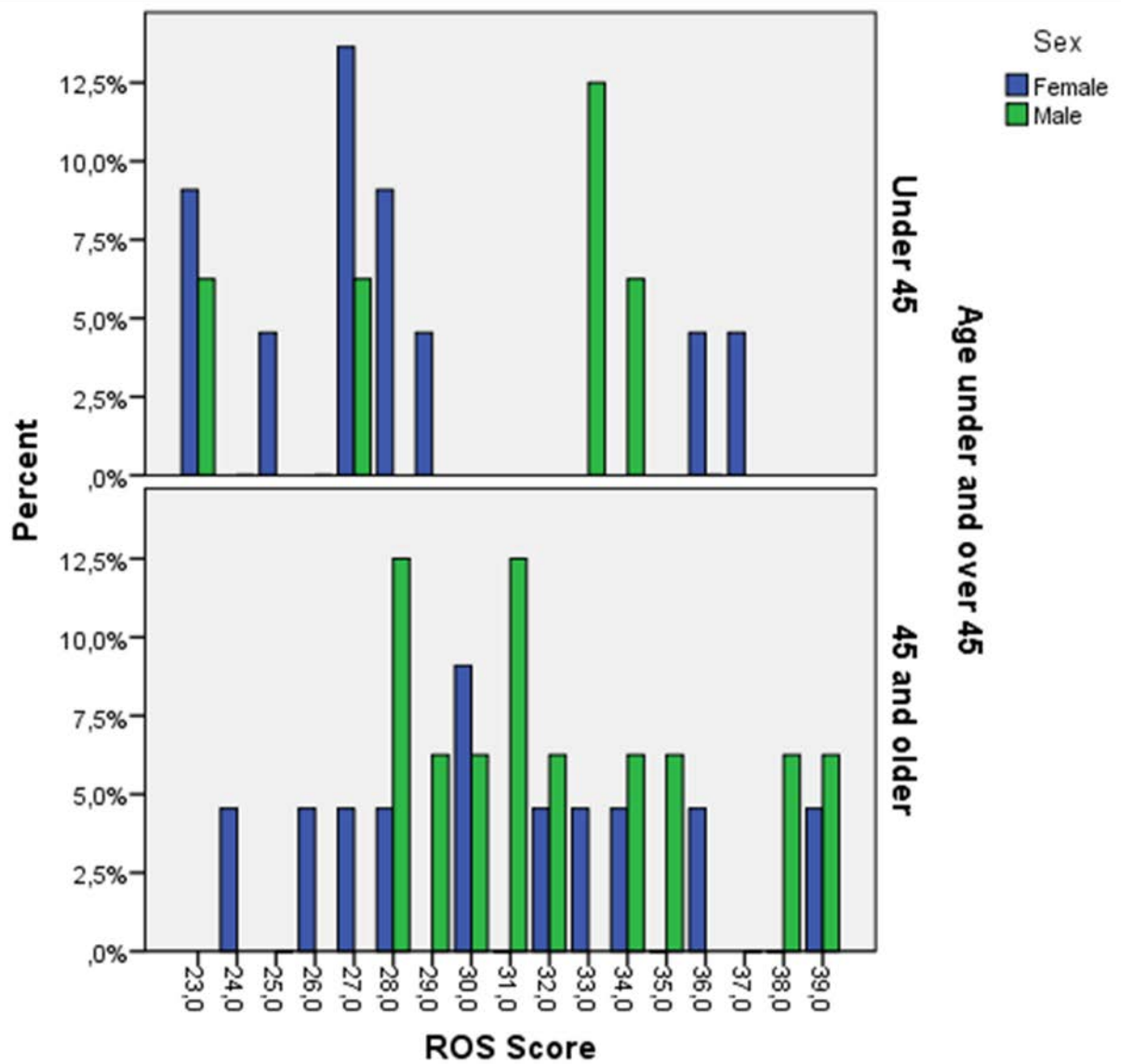




Figure 8. Results of Collaboration Sub-study.

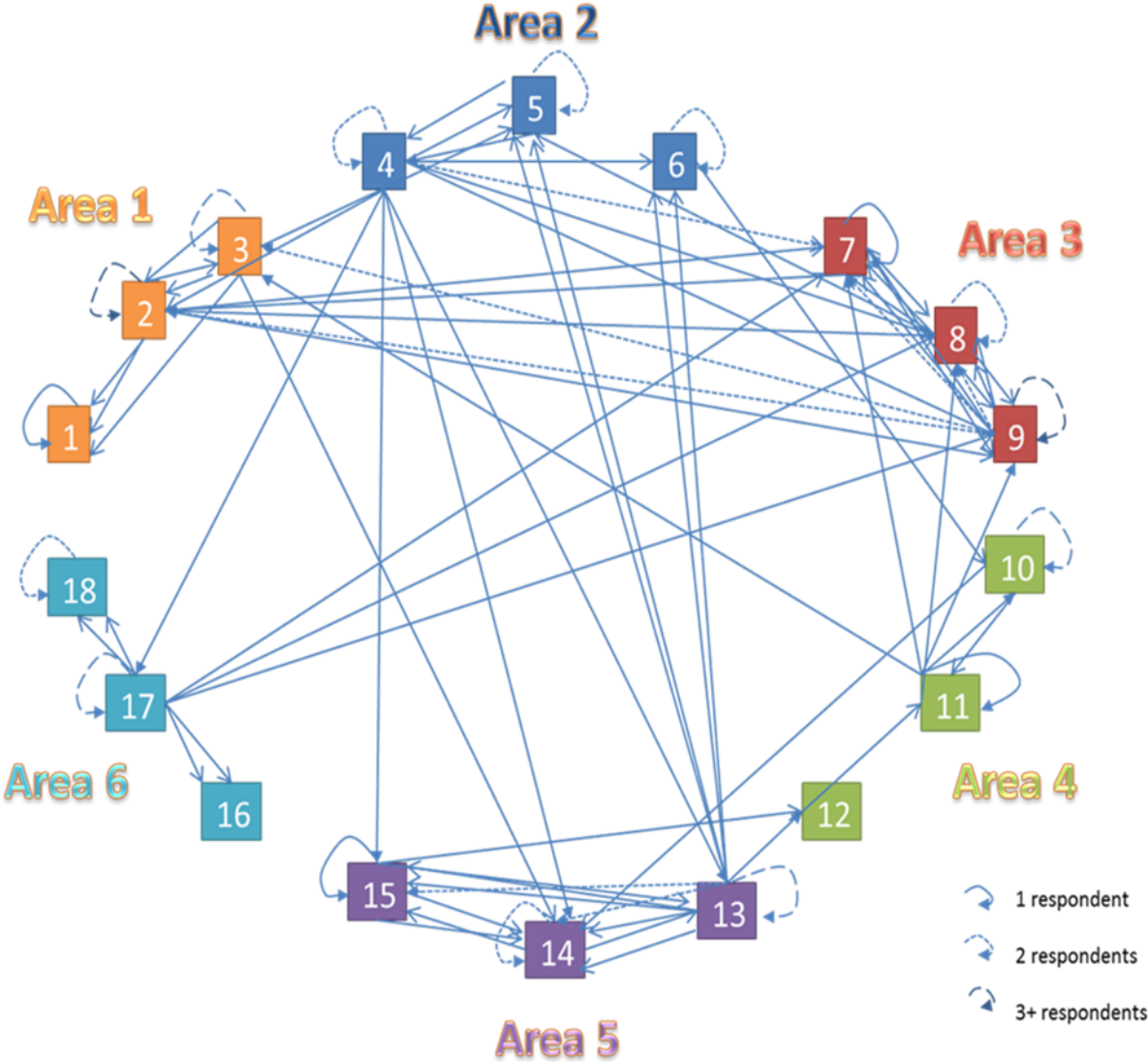


Figure 9. ALICE RAP Future Survey.

**Welcome to the ALICE RAP Future Survey!**

**It is a two-part survey of: (1) possible activities after ALICE RAP (AR) is finished (April 2016); and, (2) experience working in AR.**

**Thank you for helping us by answering the questions!**

**On behalf of Area 7, Maurice Mittelmark and Walter Farke**

**Section A: Part I: Activities after ALICE RAP**

ALICE RAP is considering ways that our science-based approach to addictions policy should be maintained after the project ends in 2016. This survey is intended to signal the degree to which we are prepared to contribute to various scenarios for a future after AR. Please, therefore, respond to the following questions by indicating the degree of effort you personally are willing to commit to create a future after AR. The survey is anonymous; please feel comfortable with making realistic assessments of your interest and capacity to contribute to each of the possible initiatives listed below. Please indicate the highest level of support that you will commit to each option, by checking the appropriate box:

**A1. Activities after AR (Please note that Questions marked with a \* are mandatory. That means you cannot continue until you answered all questions)**

	I will not participate	I will endorse and support, but I will not participate actively	I will participate as a supporting player, but my role must be modest	I will participate extensively
Endorse the continued pursuit of AR's Mission of an evidence-based approach to addictions policy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Connect to existing networks with like interests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Establish smaller networks built around Areas and Work Packages of AR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advocacy for the AR Mission of an evidence-based approach to addictions policy in my country/region	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Establish a formal organisation at the European level to continue on the path of AR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Write research funding applications at country or European levels for follow-up to AR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Write scientific papers using AR data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**A2. Comments on your answers (not required)**

Endorse the continued pursuit of AR's Mission of an evidence-based approach to addictions policy	
Connect to existing networks with like interests	
Establish smaller networks built around Areas and Work Packages of AR	
Advocacy for the AR Mission of an evidence-based approach to addictions policy in my country/region	

Establish a formal organisation at the European level to continue on the path of AR

--	--	--	--	--

Write research funding applications at country or European levels for follow-up to AR

--	--	--	--	--

Write scientific papers using AR data

--	--	--	--	--

## Section B: Part II: My AR experience

AR wishes to learn about ways to foster scientific collaboration in future transdisciplinary research projects. Indicate the degree to which each of the following statements represents your own experience in AR. The survey is anonymous; please feel comfortable with making realistic statements of your experience, by checking the appropriate box:

### B1. Below this table you may comment on your choice.

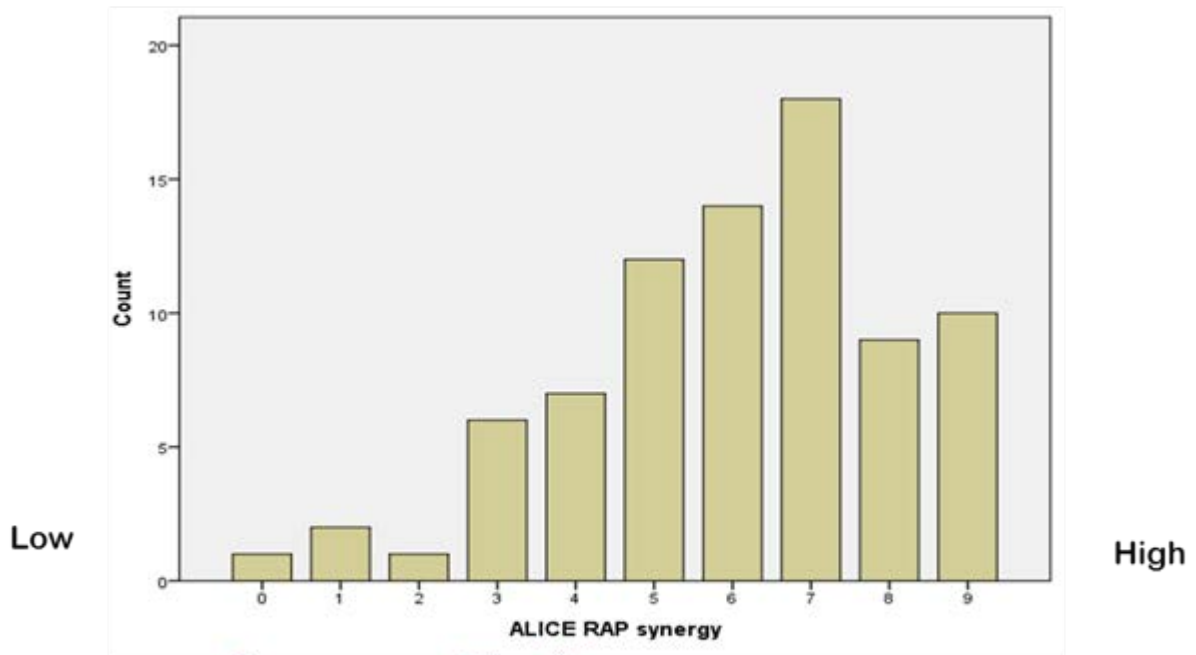
	I have not experienced this at all	I have experienced this rarely	I have experienced this occasionally	I have experienced this frequently
I have the possibility to propose improvements & new ideas at any level of working in AR (WP, Area or project as a whole)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plenary AR meetings have not been effective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is a clear task distribution among AR scientists within the Area that I mostly contribute to	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR communications from the coordinating team are infrequent and/or unclear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The work schedule for the AR tasks I am involved in is clear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR leadership by the coordinating team has been too hierarchical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The deadlines for the AR tasks I am involved in are reasonable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR is too dominated by social science perspectives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR's leadership by the coordinating team has been too diffuse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR has a shared Mission that has meaning for my AR work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In AR, too much power is concentrated in too few people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is satisfactory communication within Work Packages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR as a whole has too many elements & is too complex	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR as a whole has satisfactory problem-solving capacity & routines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My scientific expectations are being met by AR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR is too dominated by non-science factors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others in AR show interest in my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	I have not experienced this at all	I have experienced this rarely	I have experienced this occasionally	I have experienced this frequently
My attempts to collaborate across Areas have not been well received	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR as a whole has sufficient scientific expertise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel welcome to offer my ideas about AR science	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR is too dominated by biomedical science perspectives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I do not know the right channels through which to participate in AR as a whole	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is satisfactory communication within Areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My work is so specialised that I do not need AR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have sufficient financial resources to undertake my AR work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel welcome to offer my ideas about reframing addiction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The quality of AR work does not meet my scientific standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have satisfactory communication with AR's coordinating team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I disagree with AR's ideas about reframing addictions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR is achieving significant synergy in addictions research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**B2. Comments on your answers (not required)**

I have the possibility to propose improvements & new ideas at any level of working in AR (WP, Area or project as a whole)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plenary AR meetings have not been effective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is a clear task distribution among AR scientists within the Area that I mostly contribute to	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR communications from the coordinating team are infrequent and/or unclear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The work schedule for the AR tasks I am involved in is clear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR leadership by the coordinating team has been too hierarchical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The deadlines for the AR tasks I am involved in are reasonable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR is too dominated by social science perspectives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR's leadership by the coordinating team has been too diffuse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR has a shared Mission that has meaning for my AR work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In AR, too much power is concentrated in too few people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 10. Measure of synergy.

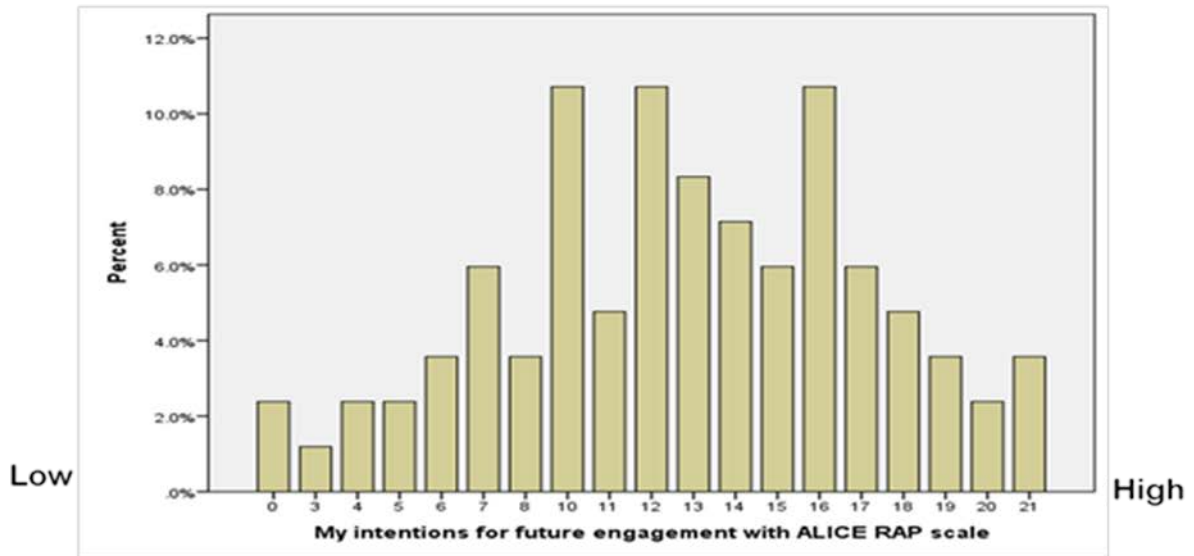


Summary score of these items:

- ALICE RAP is achieving significant synergy in addictions research
- My work is so specialised that I do not need ALICE RAP
- The quality of ALICE RAP work does not meet my scientific standards



Figure 11. Measure of attitude towards continuity.



Summary score of these items:

- Endorse... pursuit of AR's Mission of an evidence-based approach to addictions policy
- Connect to existing networks with like interests
- Establish smaller networks built around Areas and Work Packages of AR
- Advocacy for the AR Mission ... approach to addictions policy in my country/region
- Establish a formal organisation at the European level to continue on the path of AR
- Write research funding applications at country or European levels for follow-up to AR
- Write scientific papers using AR data

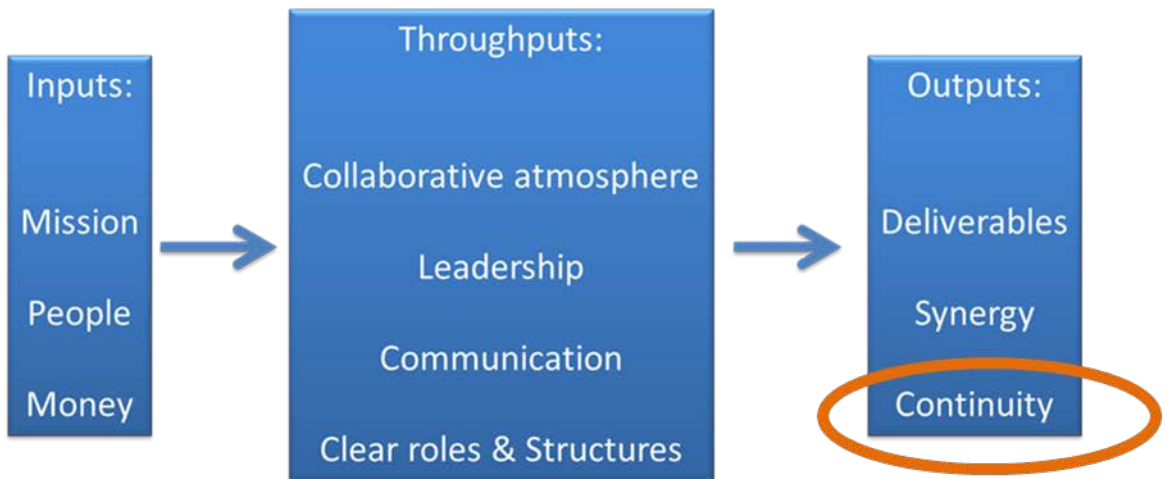
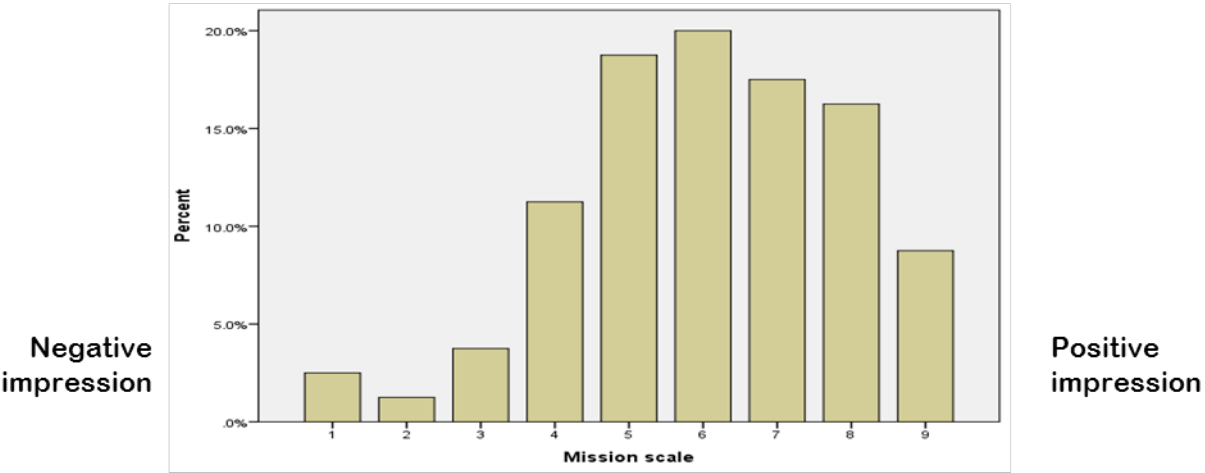




Figure 12. Measure of mission perception.



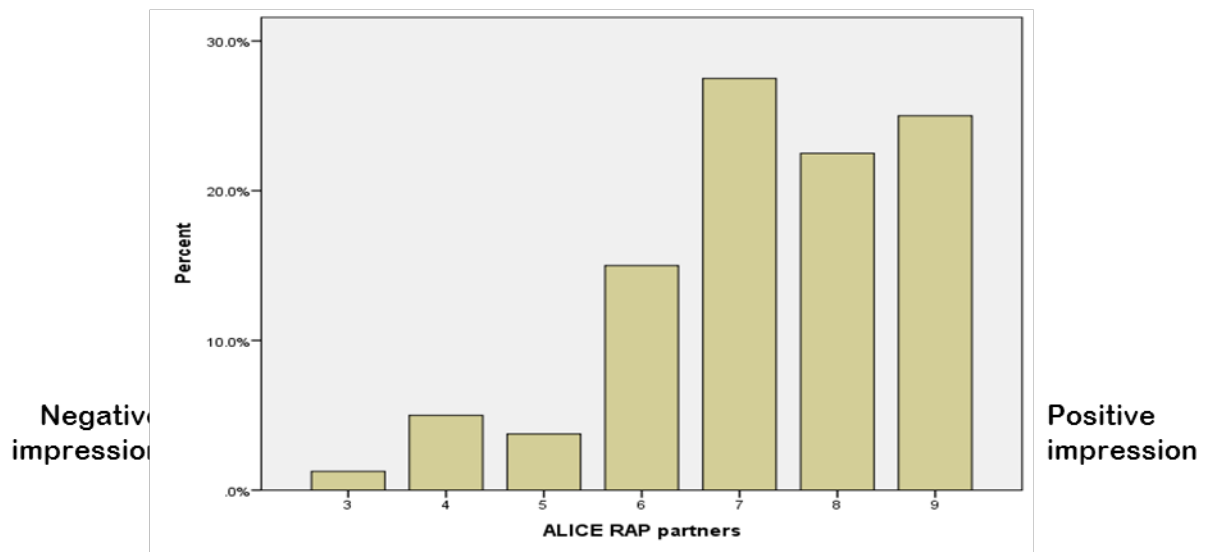
Summary score of these items:

- ALICE RAP has a shared Mission that has meaning for my ALICE RAP work
- ALICE RAP is too dominated by non-science factors
- I disagree with ALICE RAP’s ideas about reframing addictions





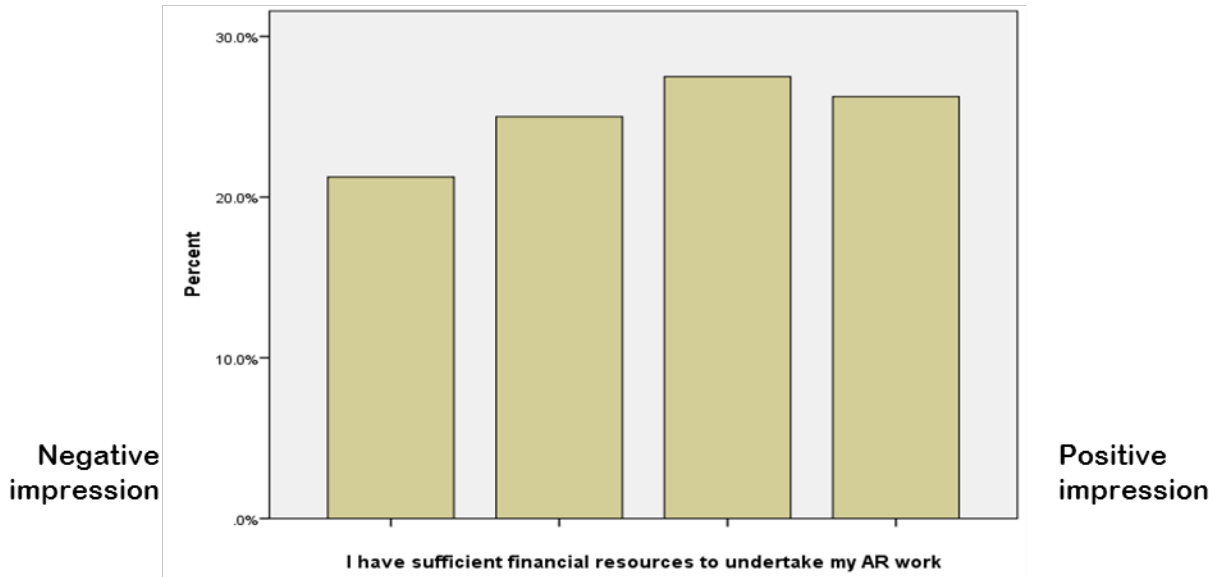
Figure 13. Measure of partner resources.



- ALICE RAP is too dominated by social science perspectives
- ALICE RAP as a whole has sufficient scientific expertise
- ALICE RAP is too dominated by biomedical science perspectives



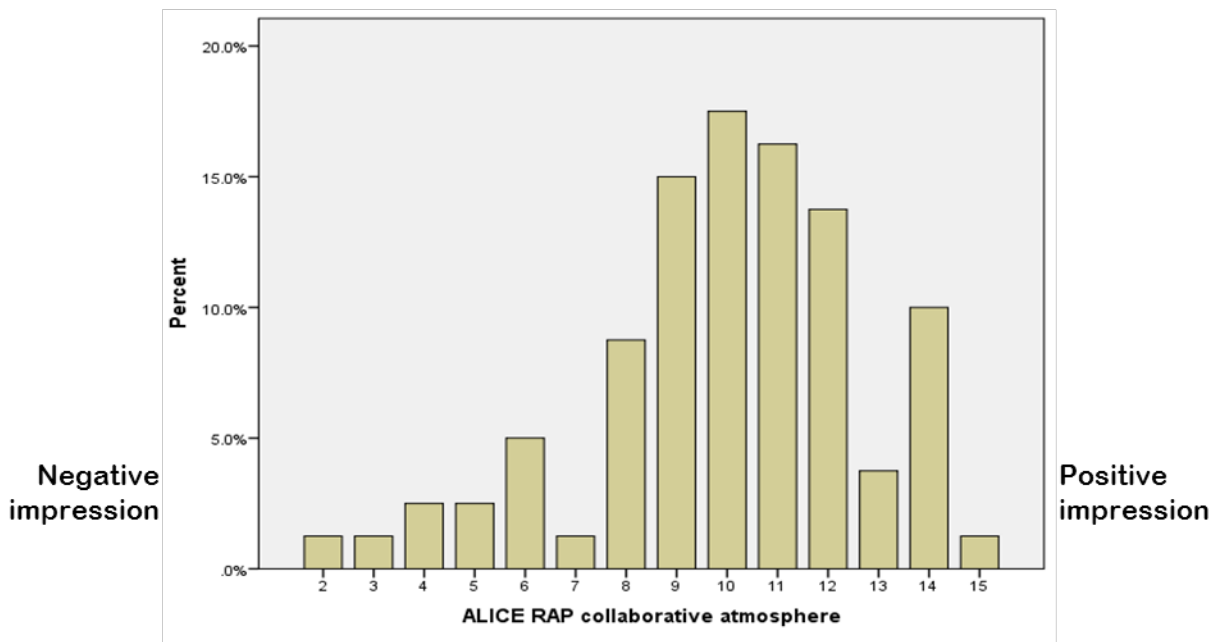
Figure 14. Measure of financial resources.



- I have sufficient financial resources to undertake my ALICE RAP work



Figure 15. Measure of collaborative atmosphere.



- Others in ALICE RAP show interest in my work
- My attempts to collaborate across areas have not been well received
- I feel welcome to offer my ideas about ALICE RAP science
- I have the possibility to propose improvements & new ideas
- I feel welcome to offer my ideas about reframing addiction

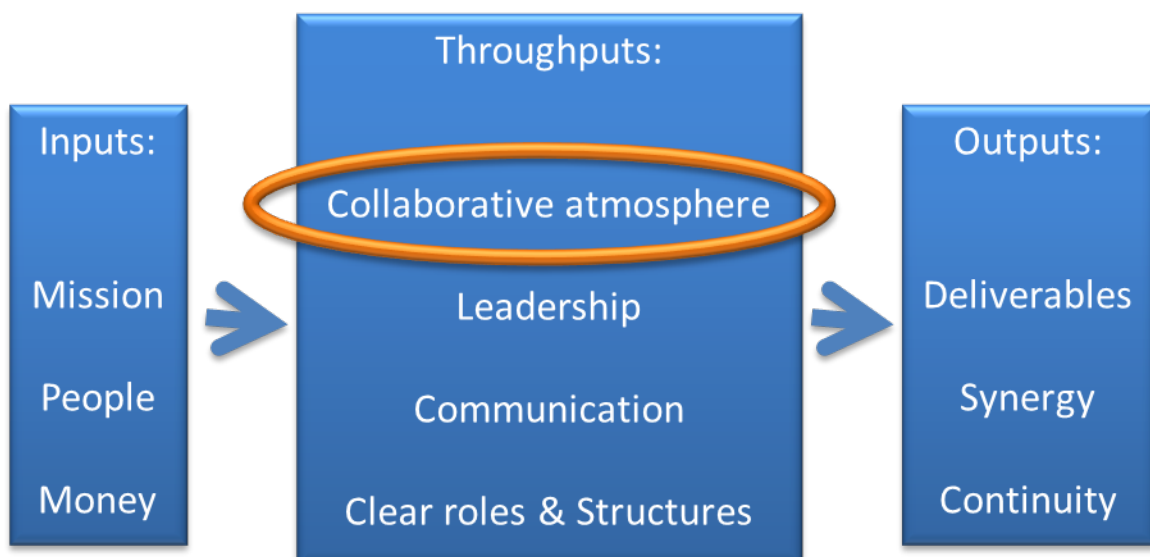
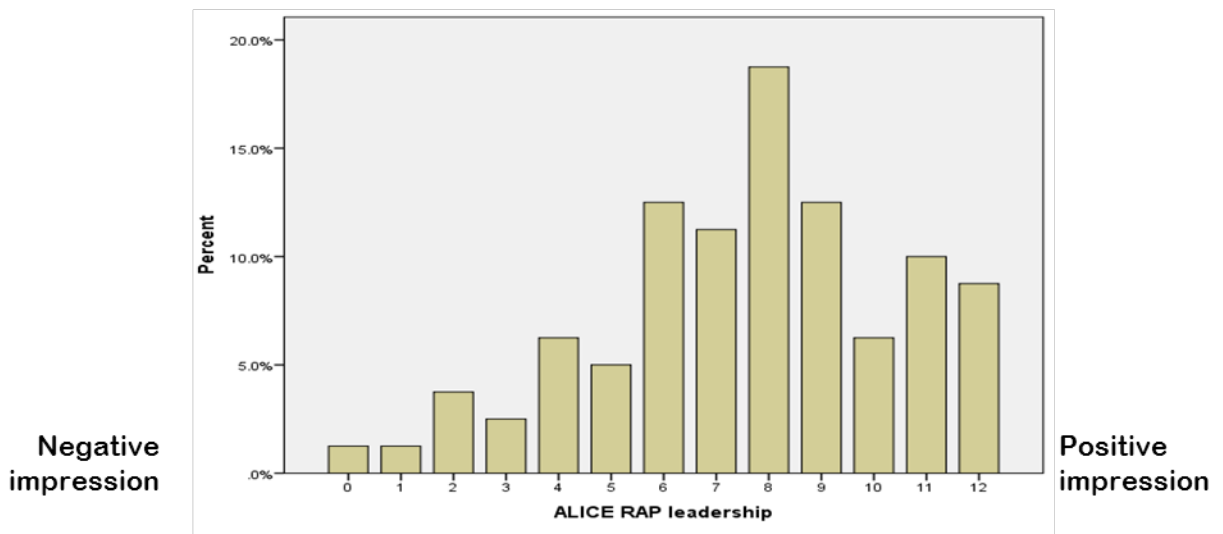


Figure 16. Measure of leadership.



- Plenary ALICE RAP meetings have not been effective
- ALICE RAP leadership by the coordinating team has been too hierarchical
- ALICE RAP leadership by the coordinating team has been too diffuse
- In ALICE RAP, too much power is concentrated in too few people

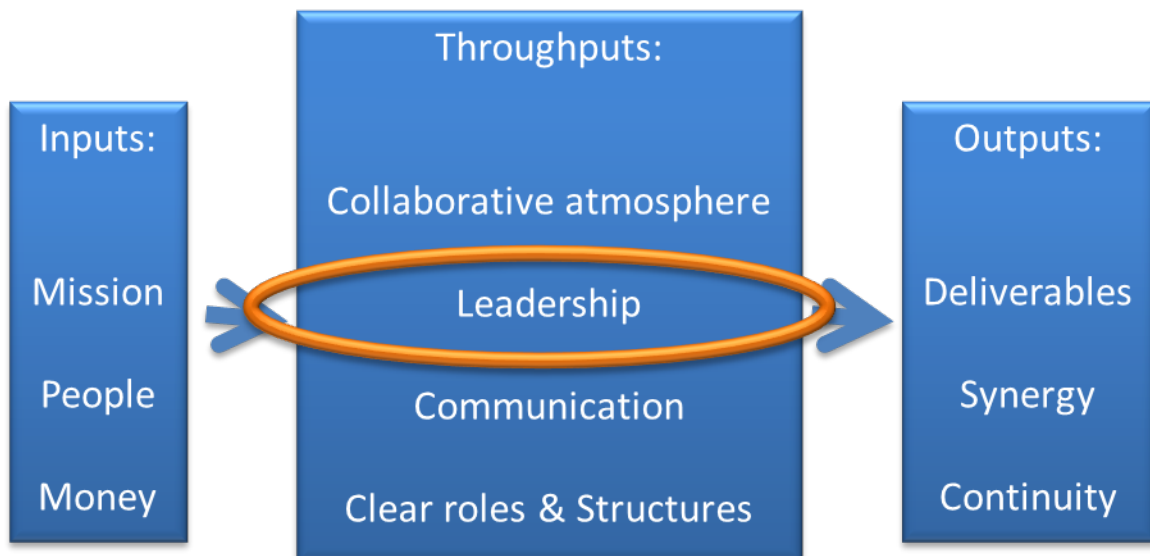
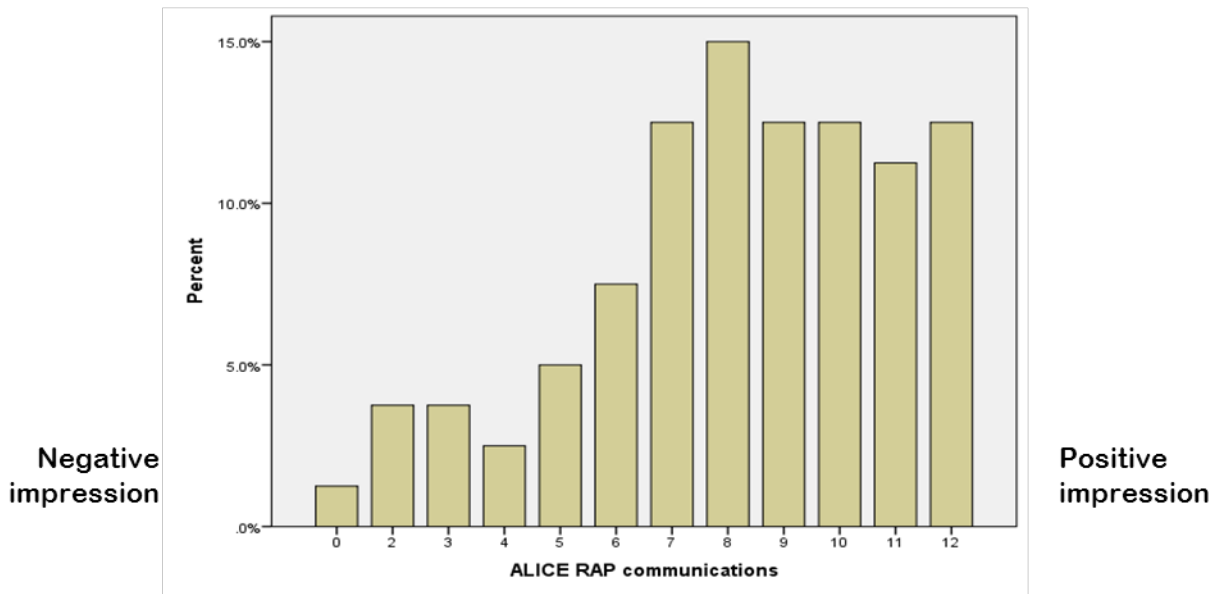


Figure 17. Measure of communication.



- ALICE RAP communications from the coordinating team are too infrequent/unclear
- There is satisfactory communication within work packages
- There is satisfactory communication within Areas
- I have satisfactory communication with ALICE RAP's coordinating team

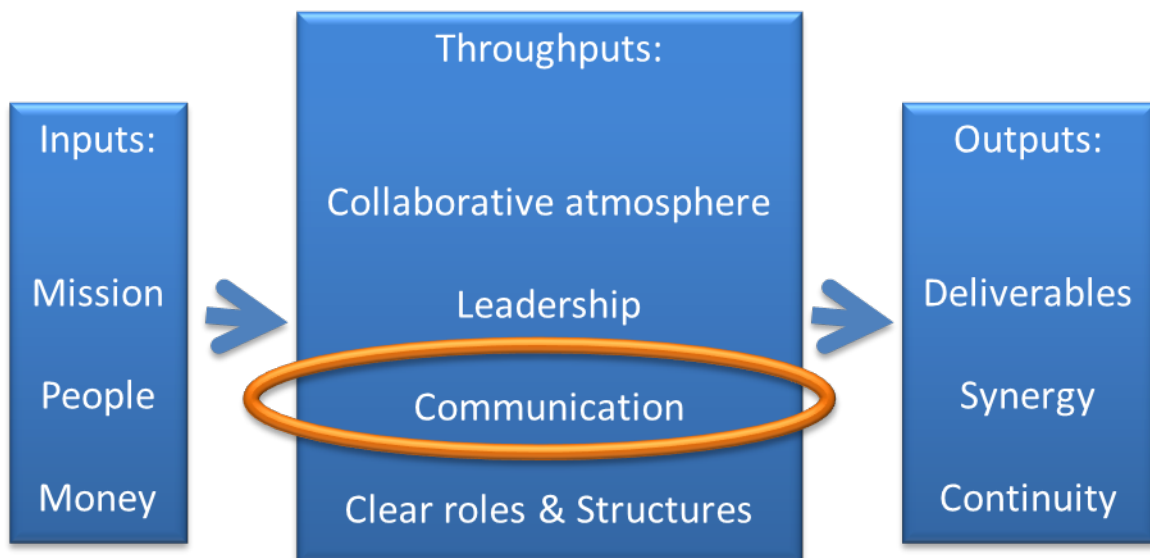
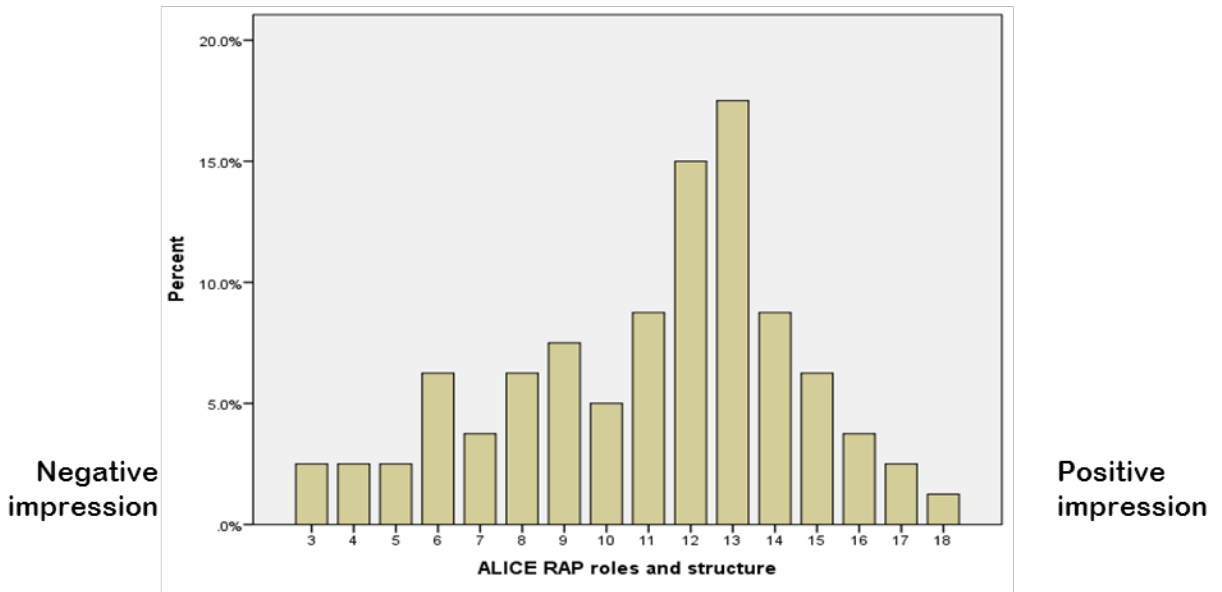


Figure 18. Measure of roles and structures.



- There is a clear task distribution among scientists within my Area
- The work schedule for the ALICE RAP tasks I am involved in is clear
- The deadlines for the ALICE RAP tasks I am involved in are clear
- ALICE RAP as a whole has too many elements & is too complex
- ALICE RAP as a whole has satisfactory problem-solving capacity & routines
- I do not know the right channels through which to participate in ALICE RAP

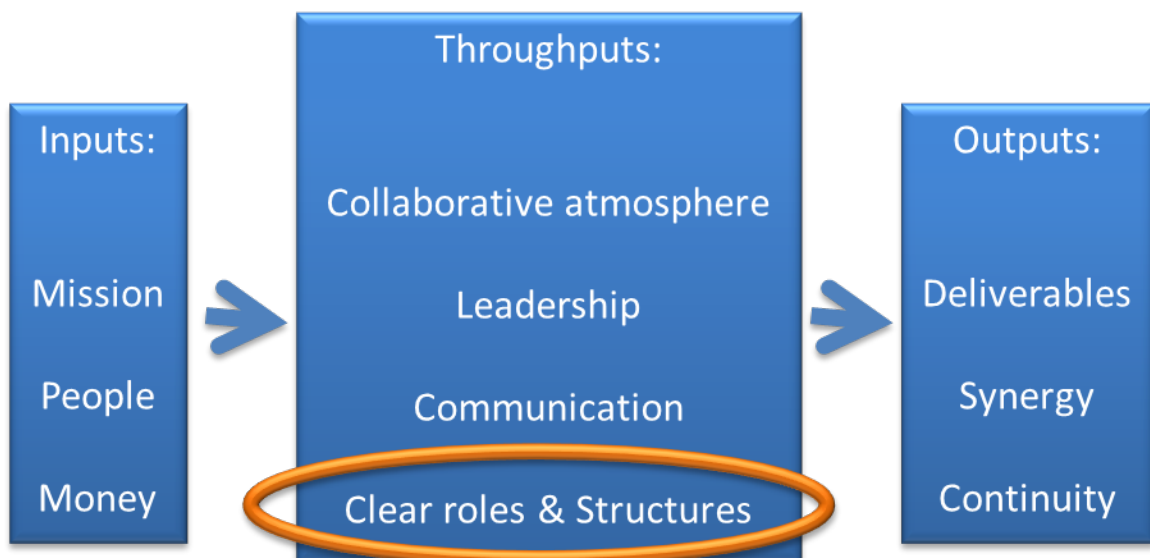
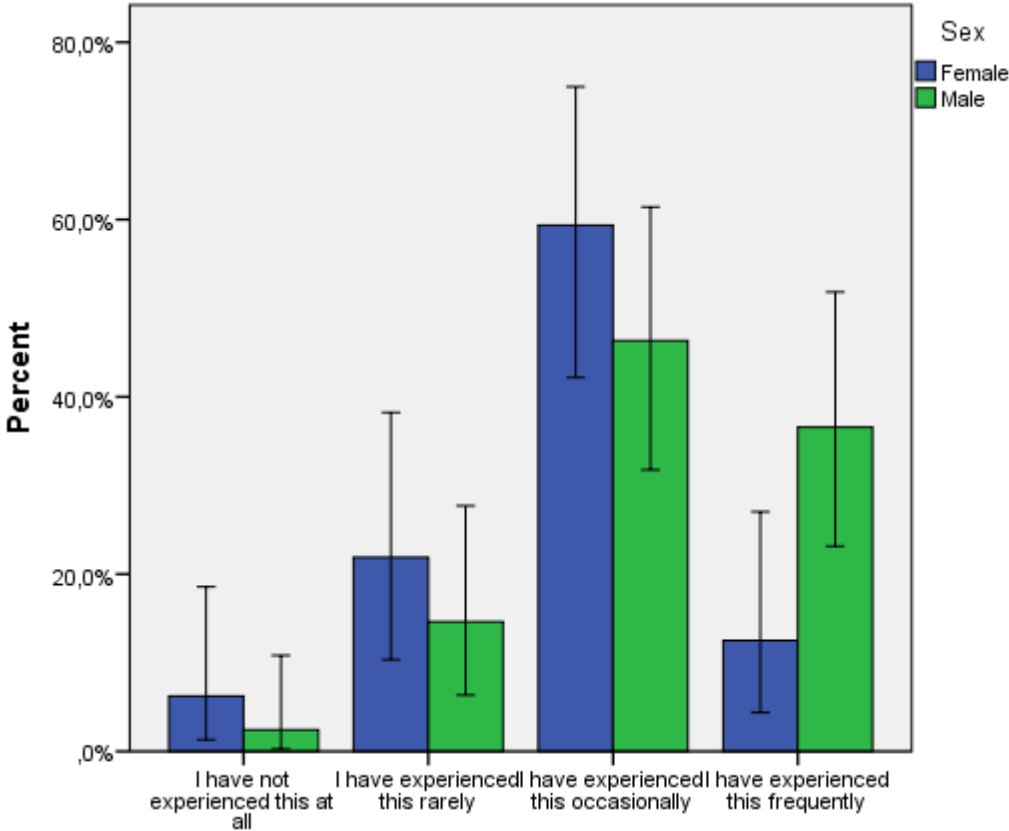
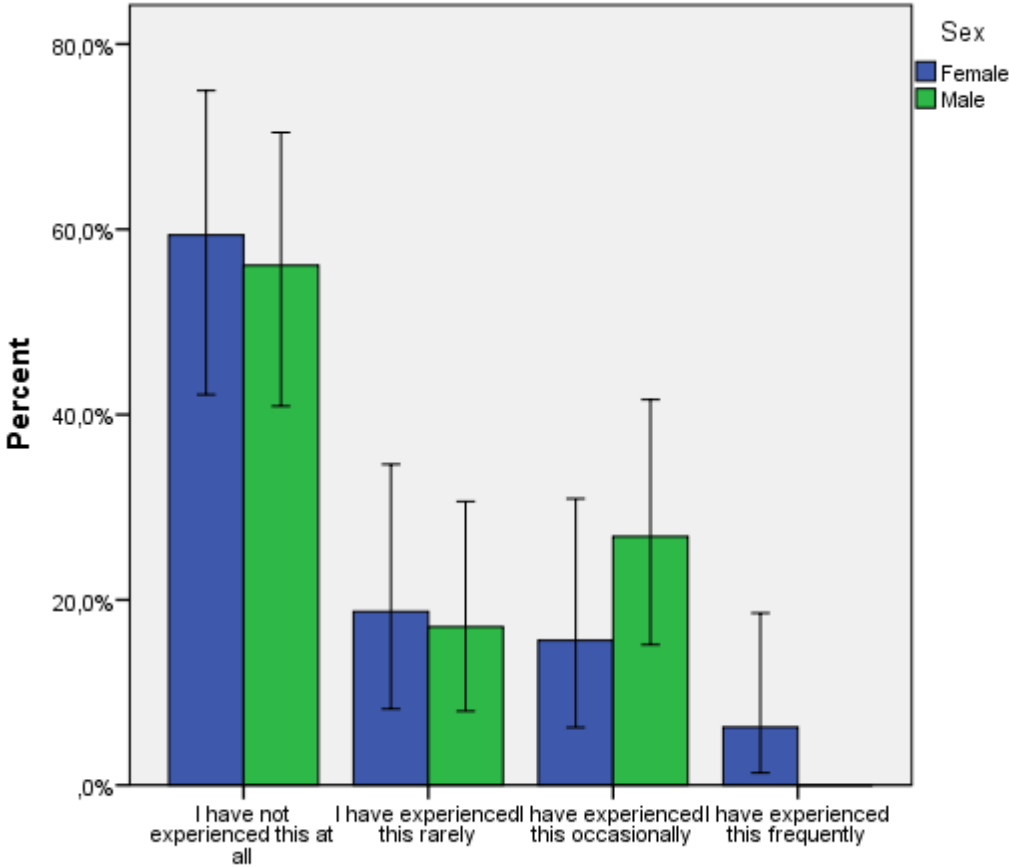


Figure 19. ALICE RAP is achieving significant synergy in addictions research.



- I want to answer 'I don't know' but am unable to

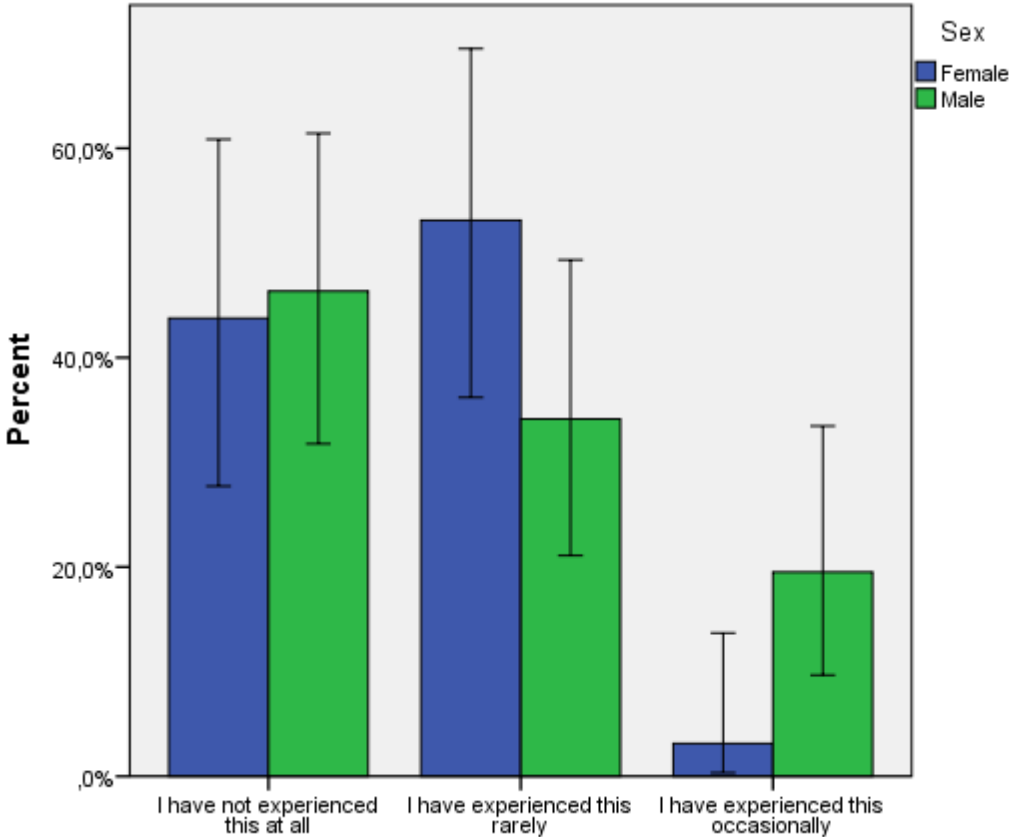
Figure 20. My work is so specialized that I do not need ALICE RAP.



- The answers to this question (in particular, others too) do not make sense

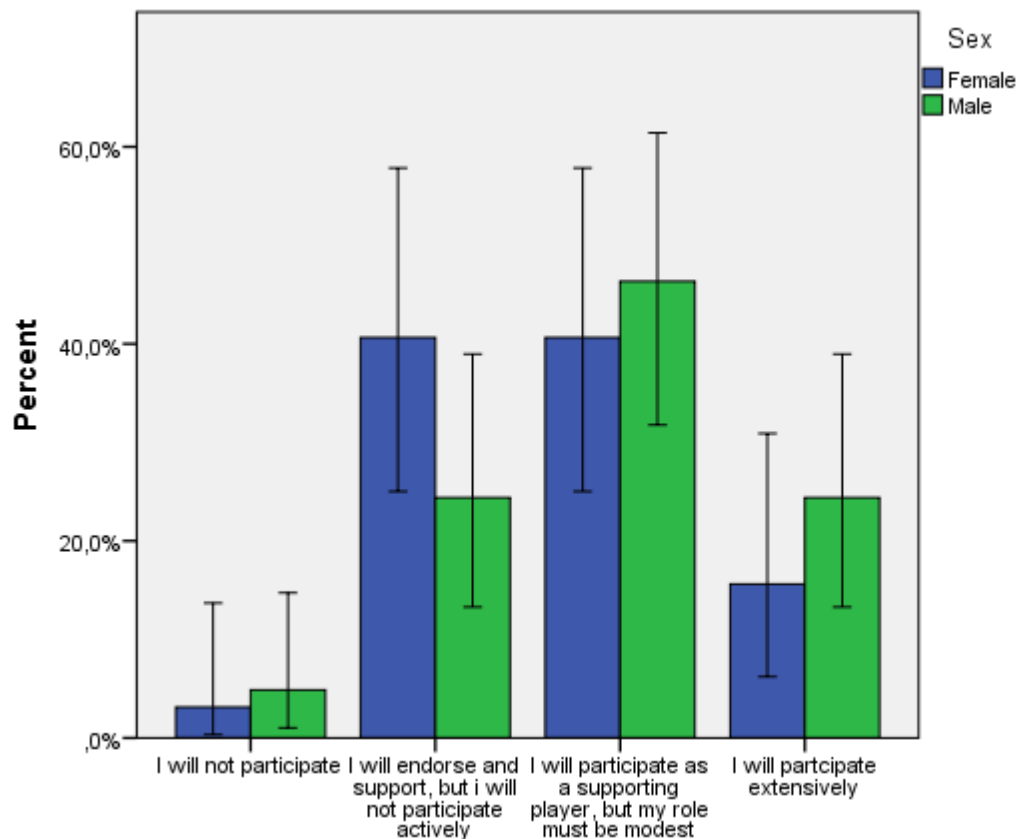


Figure 21. The quality of ALICE RAP work does not meet my scientific standards.



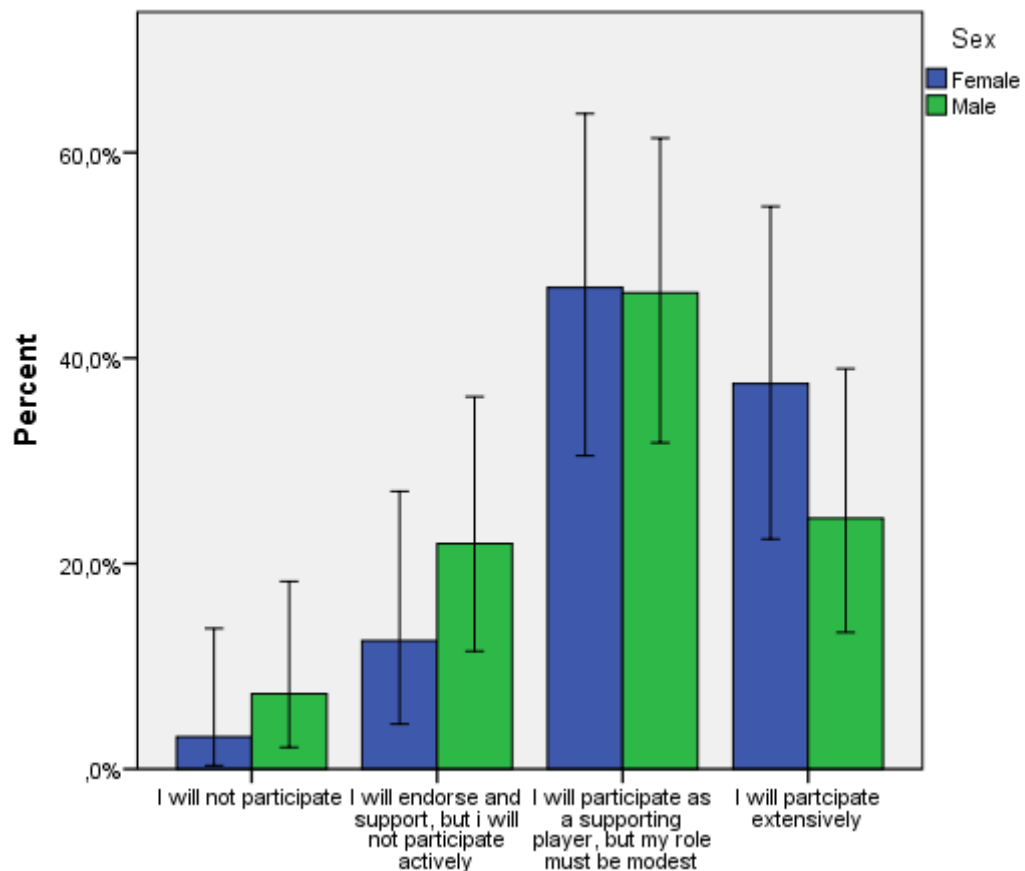
- No comments

Figure 22. Endorse the continued pursuit of ALICE RAP's Mission of an evidence-based approach to addictions policy.



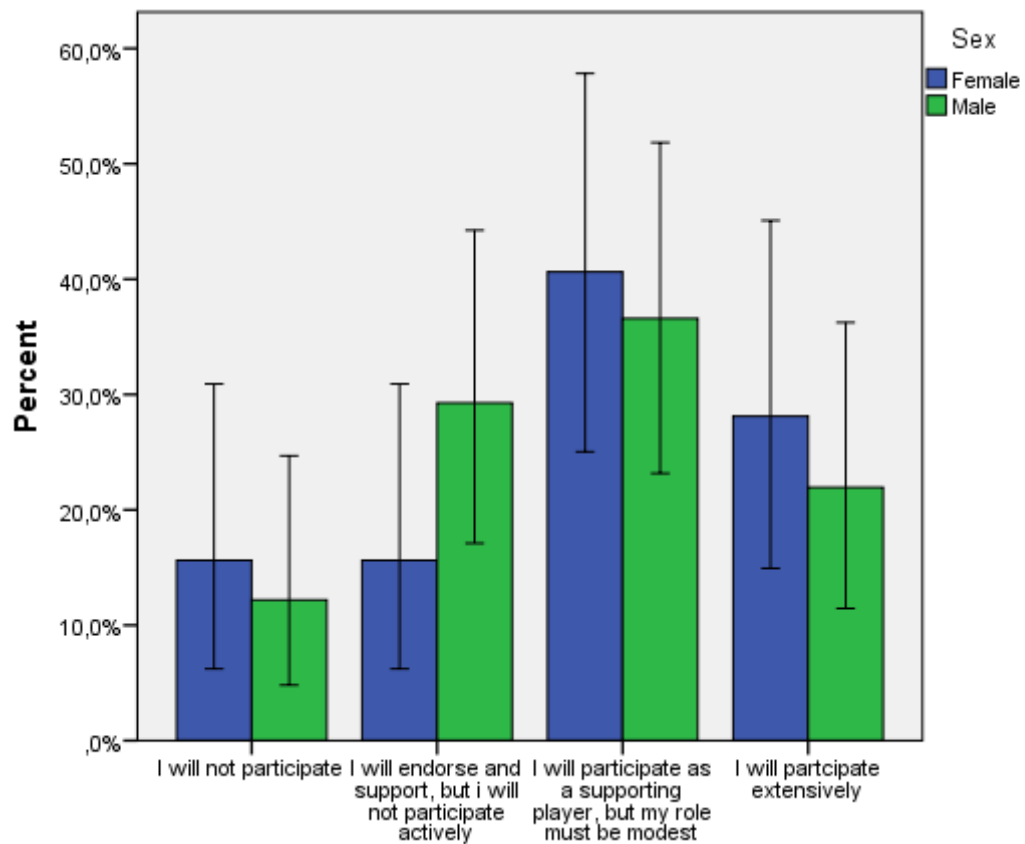
- All my answers reflect my 'seniority' (i.e. old age) and greater role in advocacy than primary research these days
- For me this means a continuation of the work I already was involved in before joining ALICE RAP
- I need freedom to query what is meant by 'evidence-based' - whose evidence is given credibility and why - and link the work to e.g. issues of 'civic science' - I do not see that happening within a public health context.
- I think any researcher should, must have this type of attitude related not only to addictions but related to any problem (medical or social).
- As regards the role - supporting player or extensive participation - it is not so easy to answer as is not fully related to the participant willingness or decision.
- not extensively because of small capacity of institute (SME with < 10 scientists)
- Not sure I fully understand the question; feel slightly uneasy about the notion of a research project having a 'mission'.
- Policy is not my focus, but do endorse this goal
- This project has important findings to share that the world has yet to hear

Figure 23. Connect to existing networks with like interests.



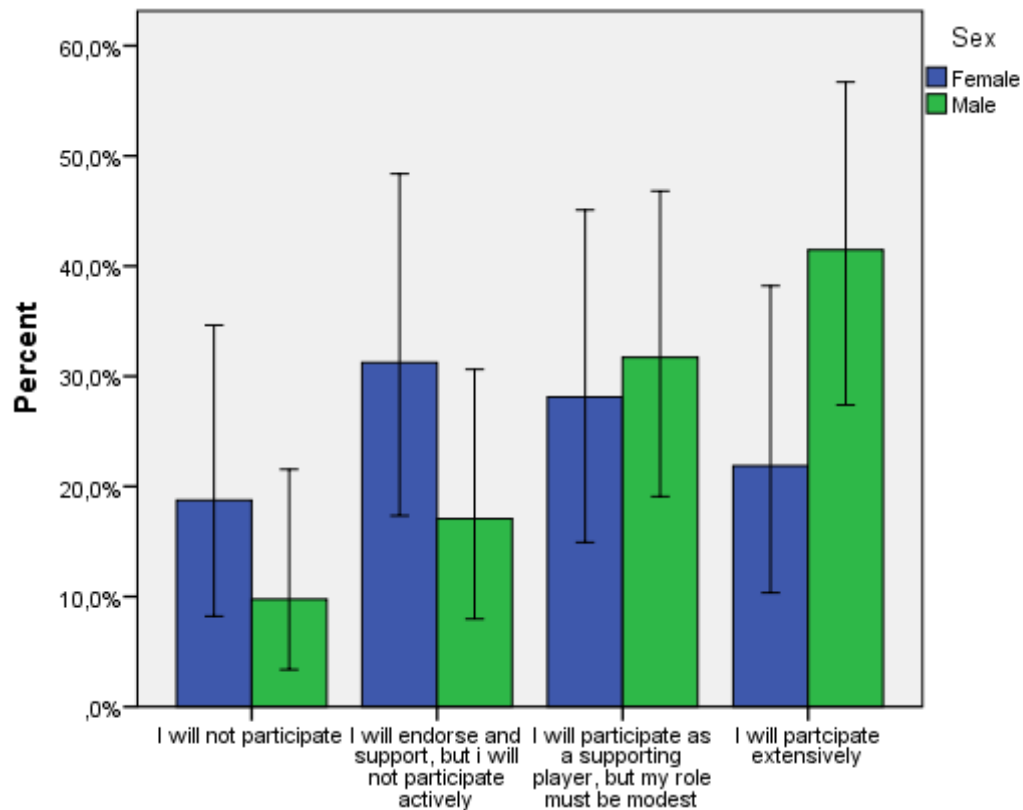
- Also this is a continuation of my work of the past decade. I participate among others in ISDDP
- Definitely important and ALICE RAP has laid some good foundations. The problem is having resources and time to follow up.
- I suppose to connect to existing networks with like interest it is not a matter of writing mails but it is a matter on working on common projects, meet together from time to time.
- not extensively because of small capacity of institute (SME with < 10 scientists)

Figure 24. Establish smaller networks built around Areas and Work Packages of ALICE RAP.



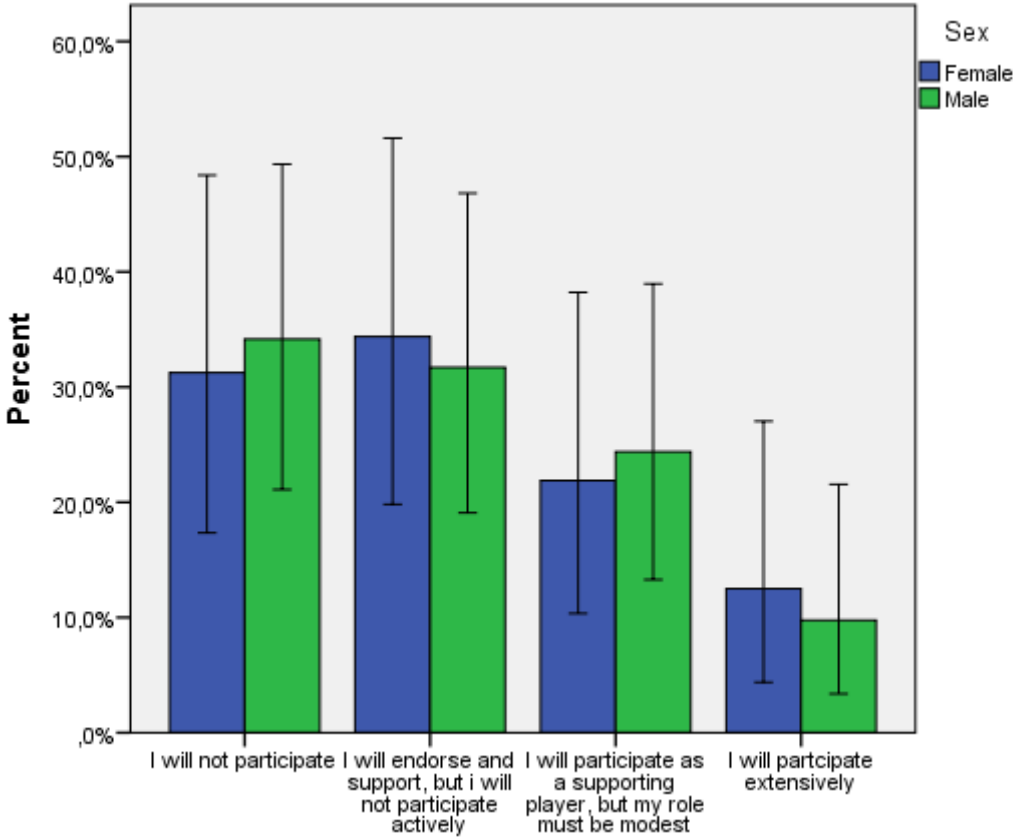
- Idem. I am working with colleagues from other organisations on some smaller networks
- not modest or extensively because of small capacity of institute (SME with < 10 scientists)
- That has already been happening. I work on several fronts with my ALICE RAP colleagues and we are writing applications etc.
- To establish a network... even smaller - in my opinion needs a more central position in the Project.

Figure 25. Advocacy for the ALICE RAP Mission of an evidence-based approach to addictions policy in my country/region.



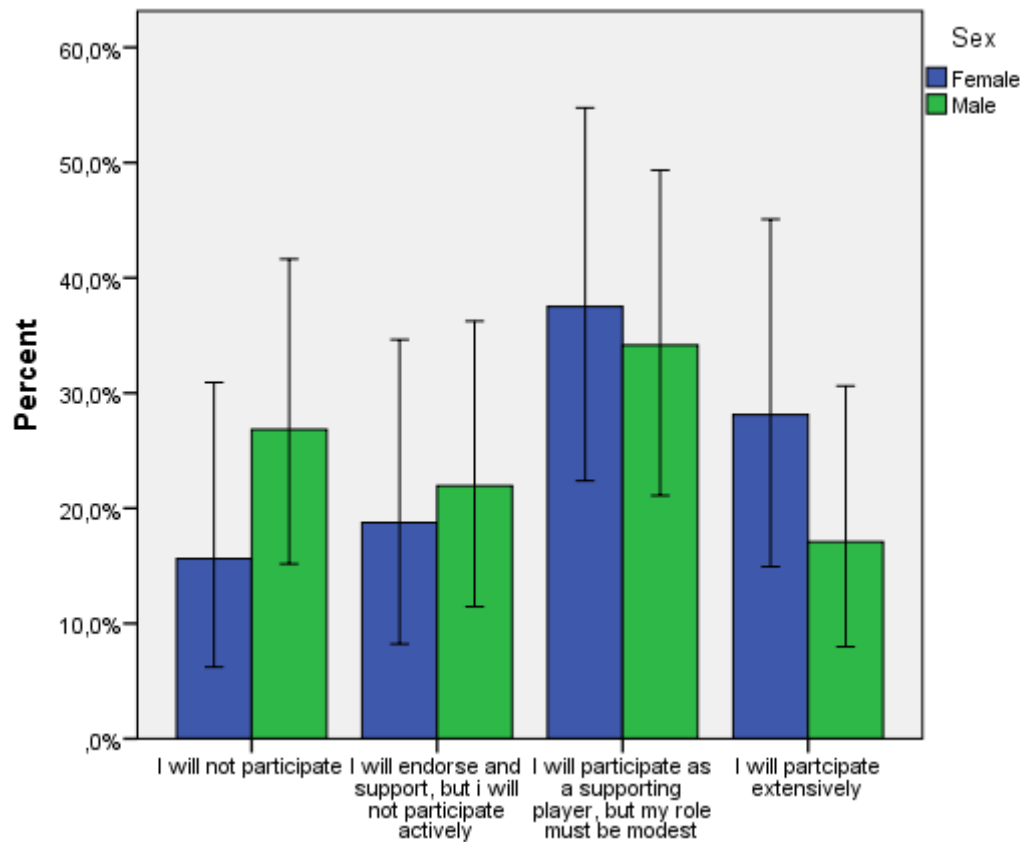
- As for item 1.
- I avoid advocacy in my work. I wish to remain as objective as possible and have the freedom to investigate all perspectives/ evidence etc.
- If the advocacy means to work on decision makers, I can tell that generally... regardless the theme - it is a difficult job. As soon as the decision makers do not finance neither the primary research nor the secondary one (systematic review), how to advocate... as researcher - the evidence-based approach?
- not modest or extensively because of small capacity of institute (SME with < 10 scientists)

Figure 26. Establish a formal organisation at the European level to continue on the path of ALICE RAP.



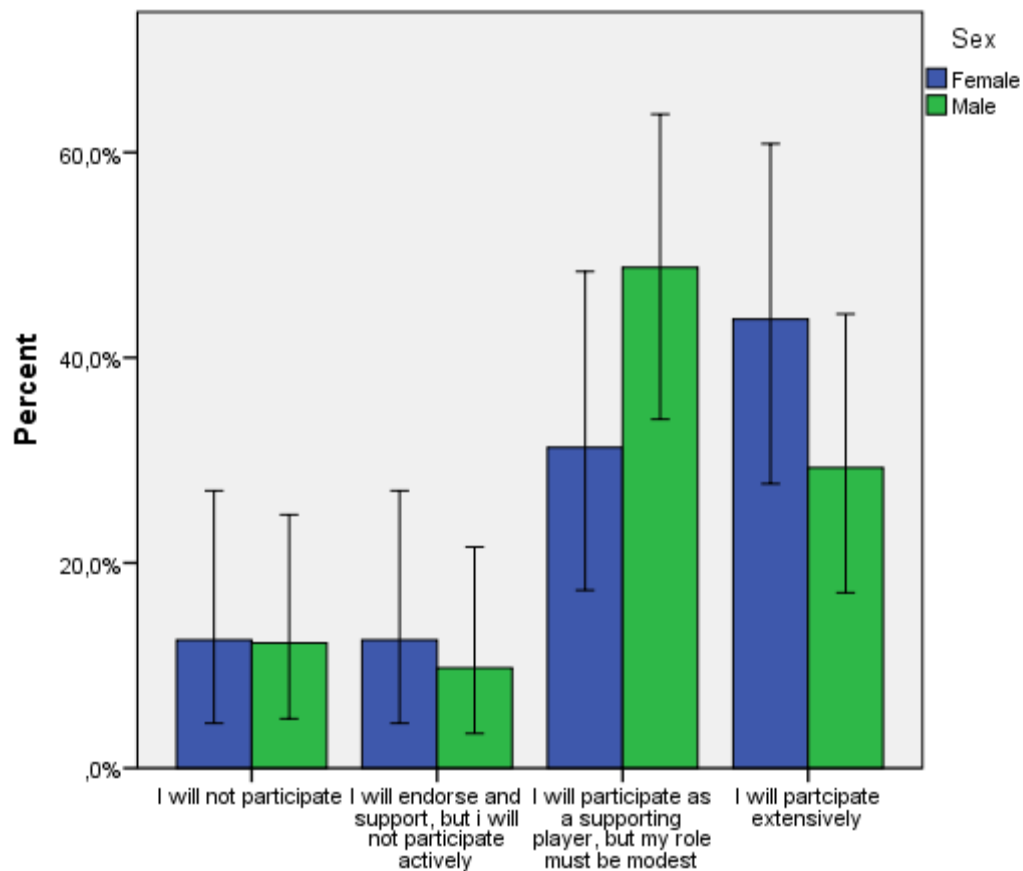
- Because we are a small SME we are not able to do that (capacity)
- I am an international advisor, so not really placed to do this
- I am not in position... as achievements in the area, as capacity to attract money, to finance or to sustain it further “ to establish such formal organisation.
- I am prepared to join such an initiative in case I think it is useful.
- I simply don't have time to do this but would be willing to consider a role in such an organisation - as long as it is not an advocacy role.

Figure 27. Write research funding applications at country or European levels for follow-up to ALICE RAP.



- I can participate in such endeavour, I have ideas, some expertise in primary research, in national component of international projects, I am able to perform in secondary research, but at European level must be another type of organisation than mine (more experienced in drug area).
- I have worked and will work on proposals for projects supporting evidence based policy making
- Perhaps in joint collaboration with other ALICE RAP members
- This is already happening and I am willing to participate in future efforts

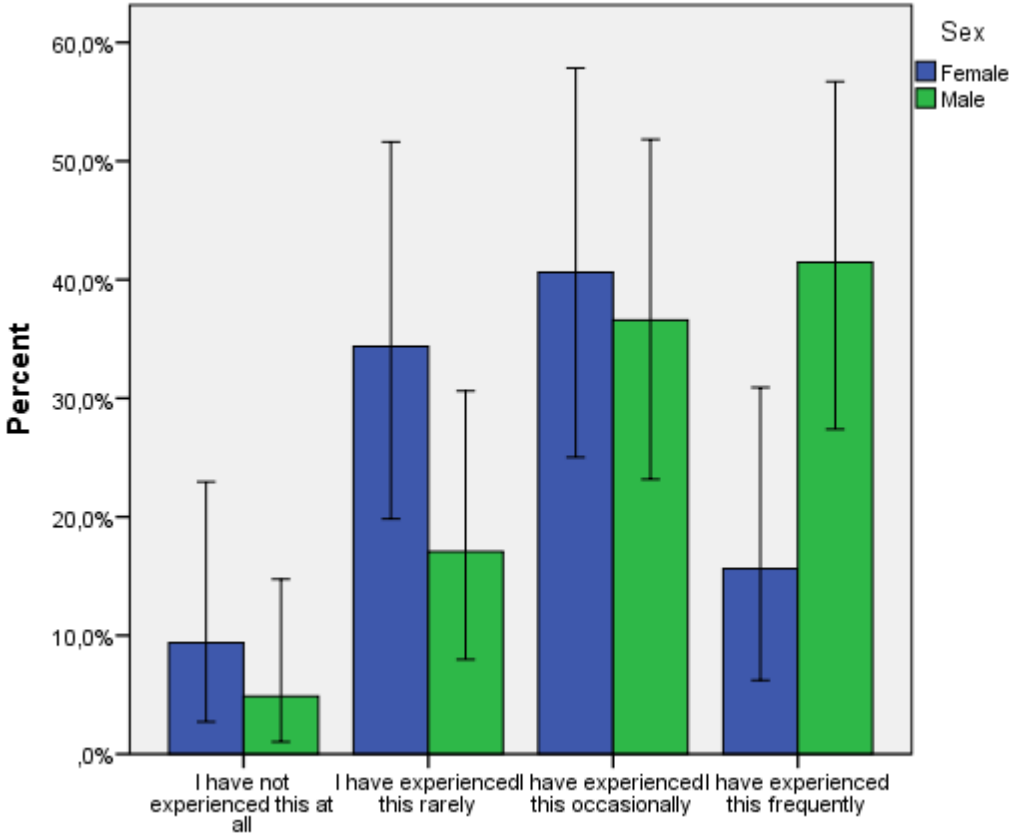
Figure 28. Write scientific papers using ALICE RAP data.



- I am still interested in writing scientific papers on different issues of addiction. I think the ALICE RAP data is huge pool to generate scientific papers. I will use them as much as possible.
- I have never been asked to be an author on anything produced by ALICE RAP, so I do not feel at all invested in these activities.
- I have written one paper on the report I have produced for ALICE RAP. At the moment I am writing another paper for a book on EU drug policy developments
- If we get access to databases and if we would constitute some working groups, it would be nice to participate.
- This is continuing. It would have been useful to have built in time for better cross-national analyses and publication.
- Yes would like to publish cannabis brief in some peer reviewed journal

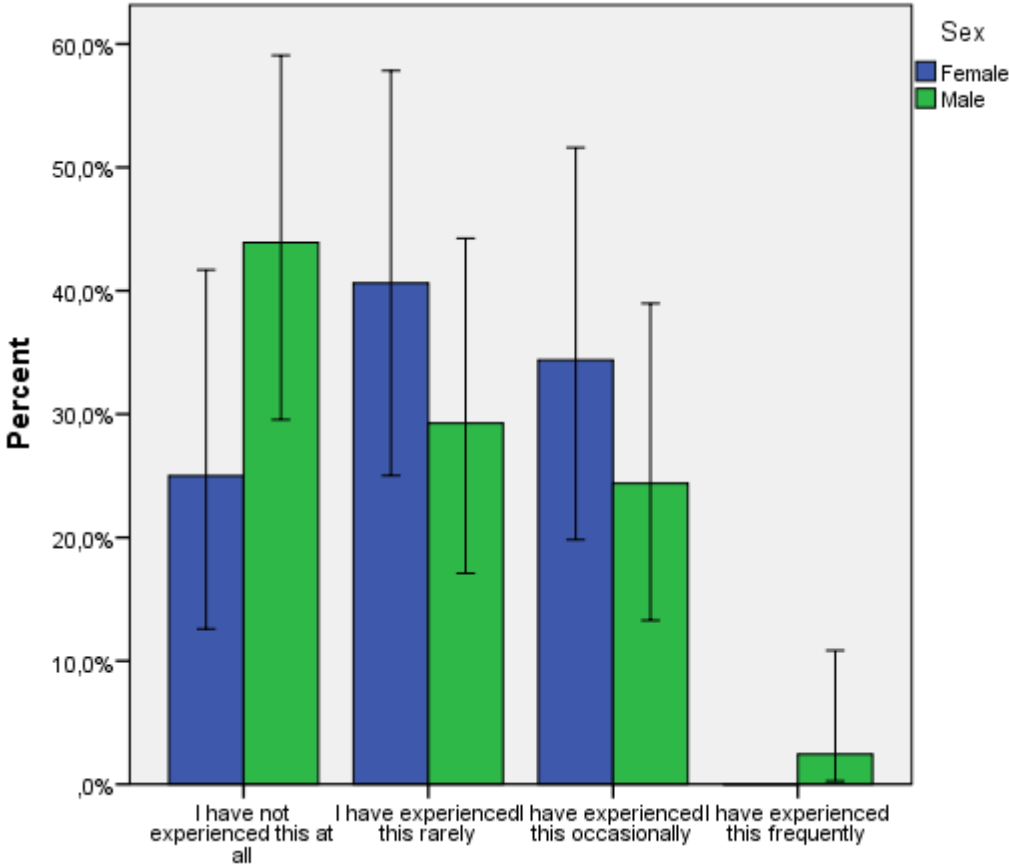


Figure 29. ALICE RAP has a shared Mission that has meaning for my ALICE RAP work.



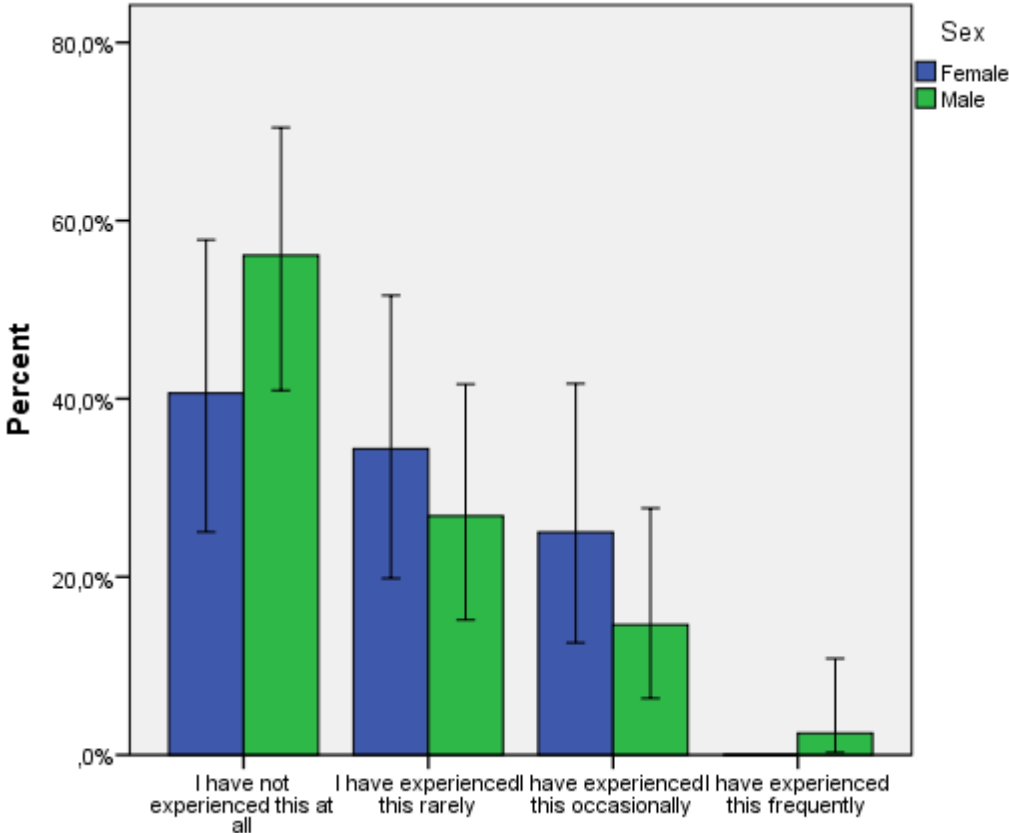
- as above - uncomfortable with any notion of a 'mission'

Figure 30. ALICE RAP is too dominated by non-science factors.



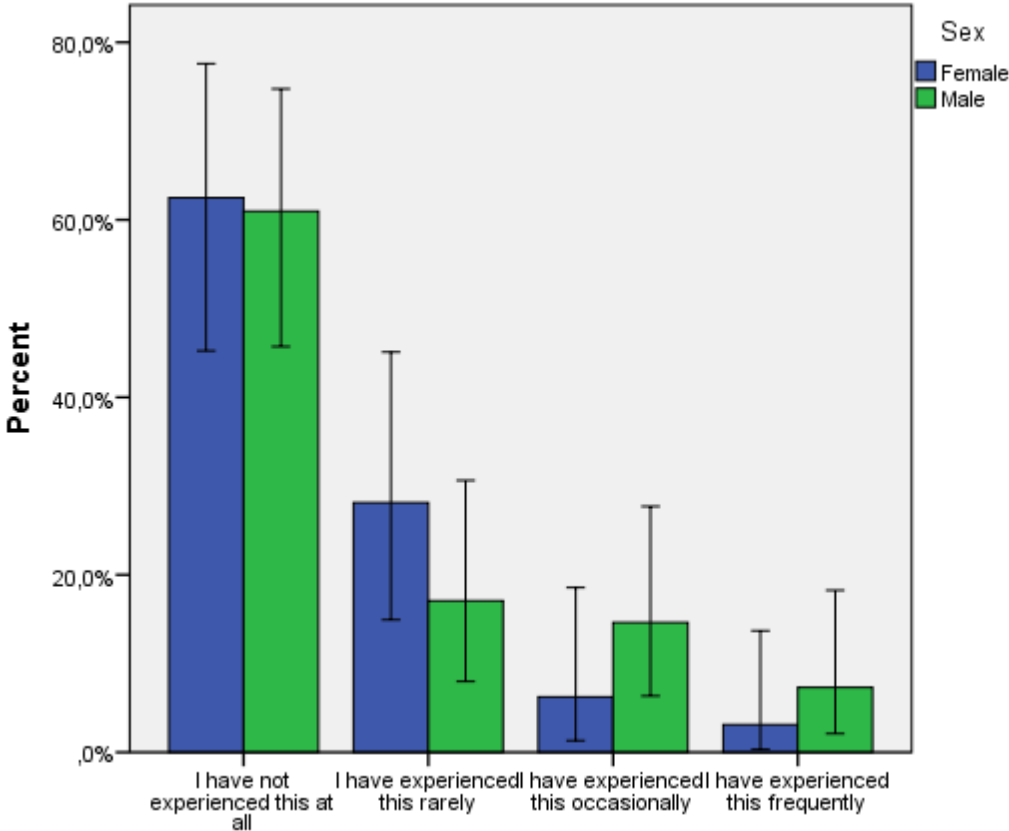
- I sometimes had the feeling that the show element played an important role
- Not sure what this means

Figure 31. I disagree with ALICE RAP's ideas about reframing addictions.



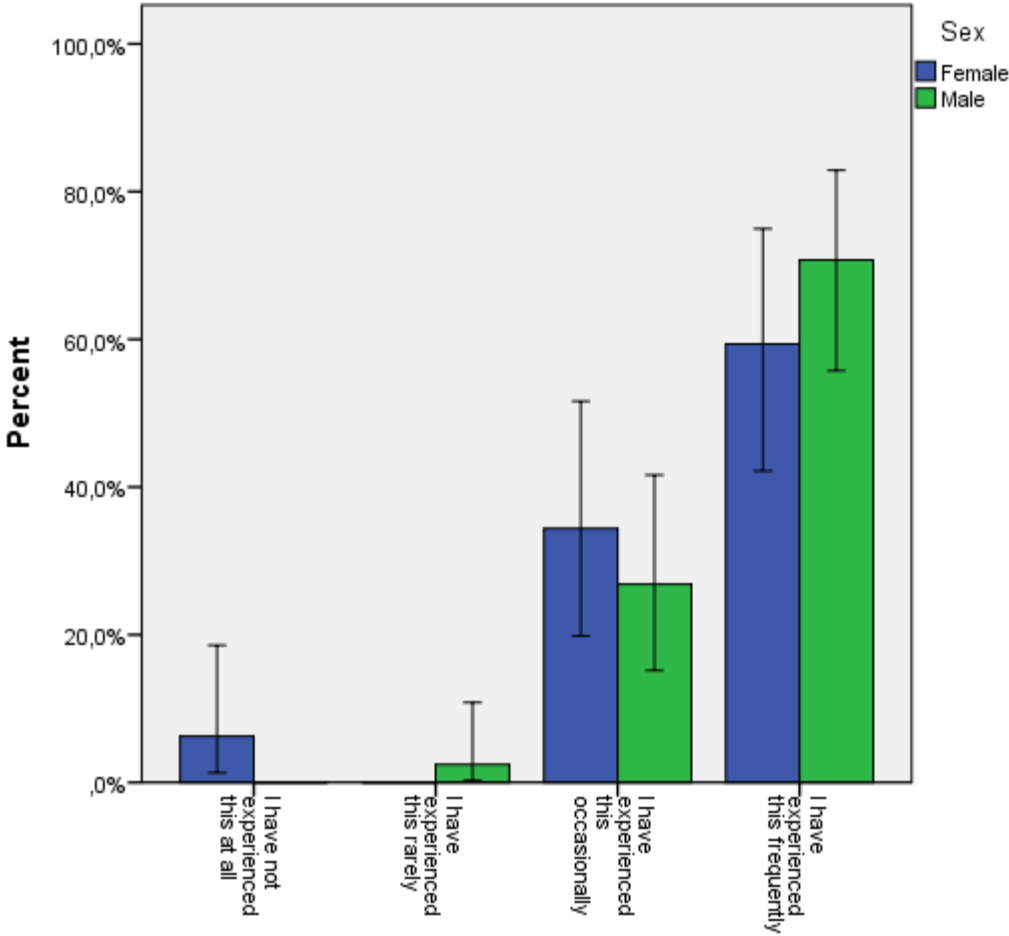
- I don't feel ALICE RAP as a whole has a distinct set of ideas, rather that each study has its own ideas.
- I'm not sure I am entirely clear about what ALICE RAP's ideas about reframing addictions are - perhaps I missed something.
- The only comment I have here is that the ALICE RAP experts might in the end agree on a reframing of addiction. But I doubt about the impact of this reframing on the 'outside world'

Figure 32. ALICE RAP is too dominated by social science perspectives.



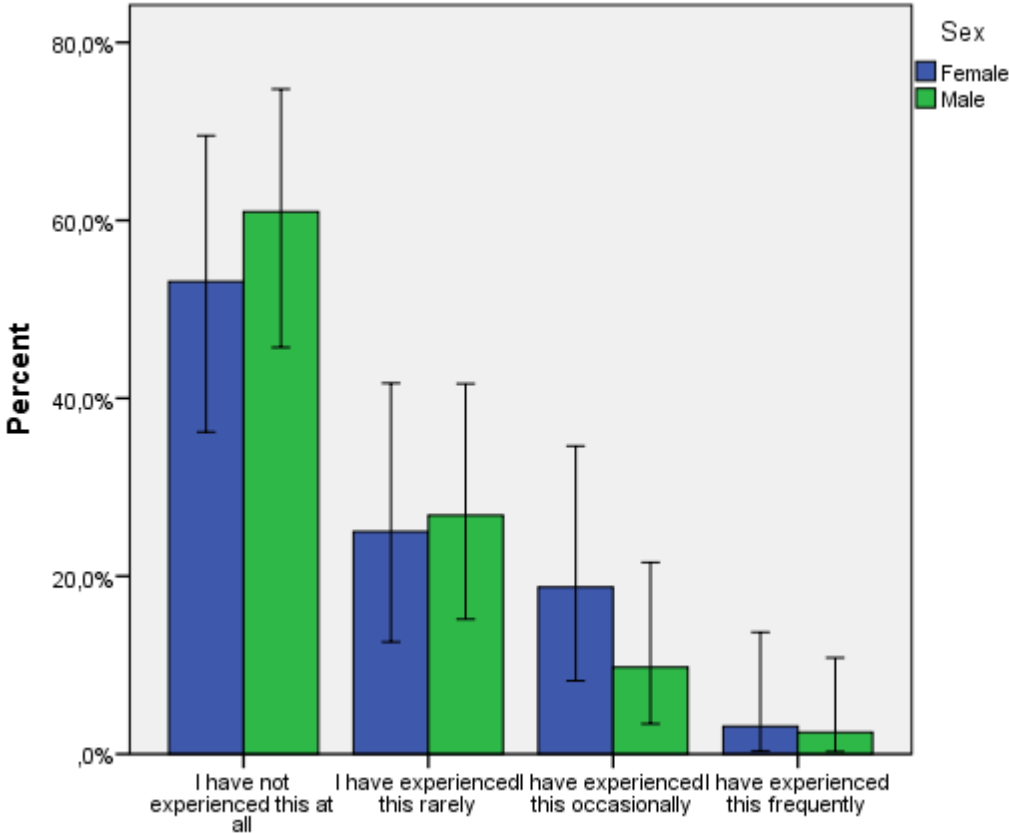
- I am not very clear about the meaning of this question. I think the ALICE RAP was not dominated by any perspective (social, medical). I did not fully know the background of the coordinators... but it seems that they had a well balance perspective, appropriate for the phenomenon.
- I think there was a good balance of disciplines

Figure 33. ALICE RAP as a whole has sufficient scientific expertise.



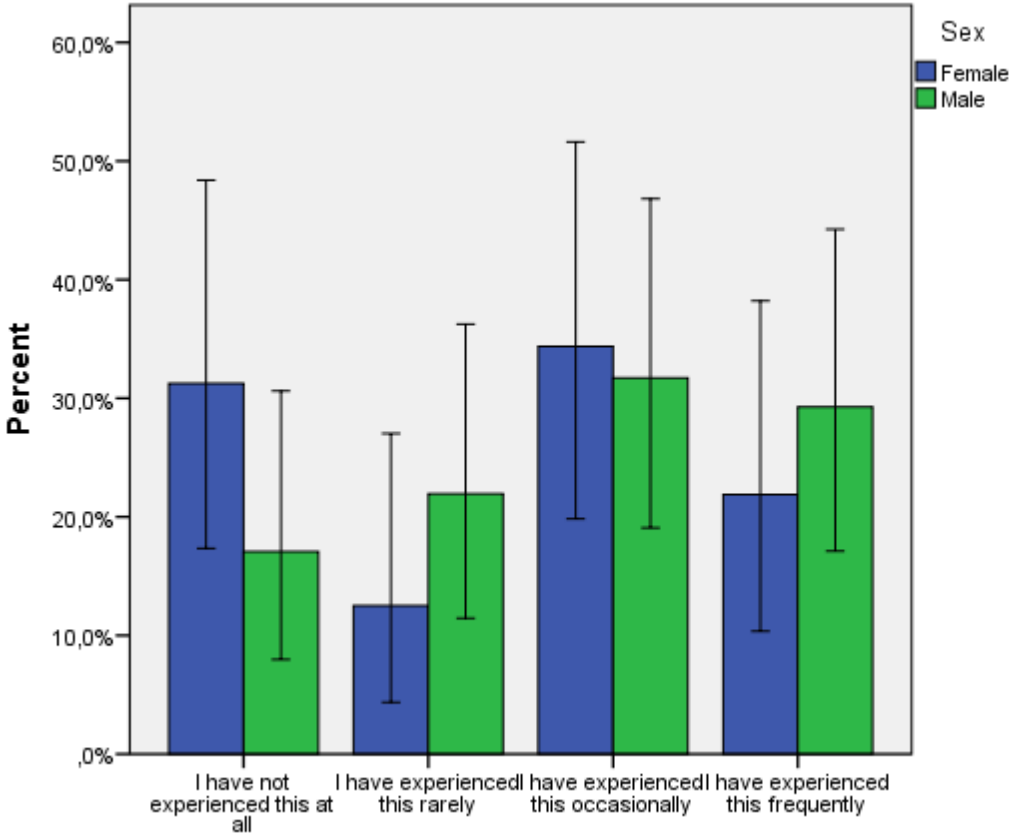
- No comments

Figure 34. ALICE RAP is too dominated by biomedical science perspectives.



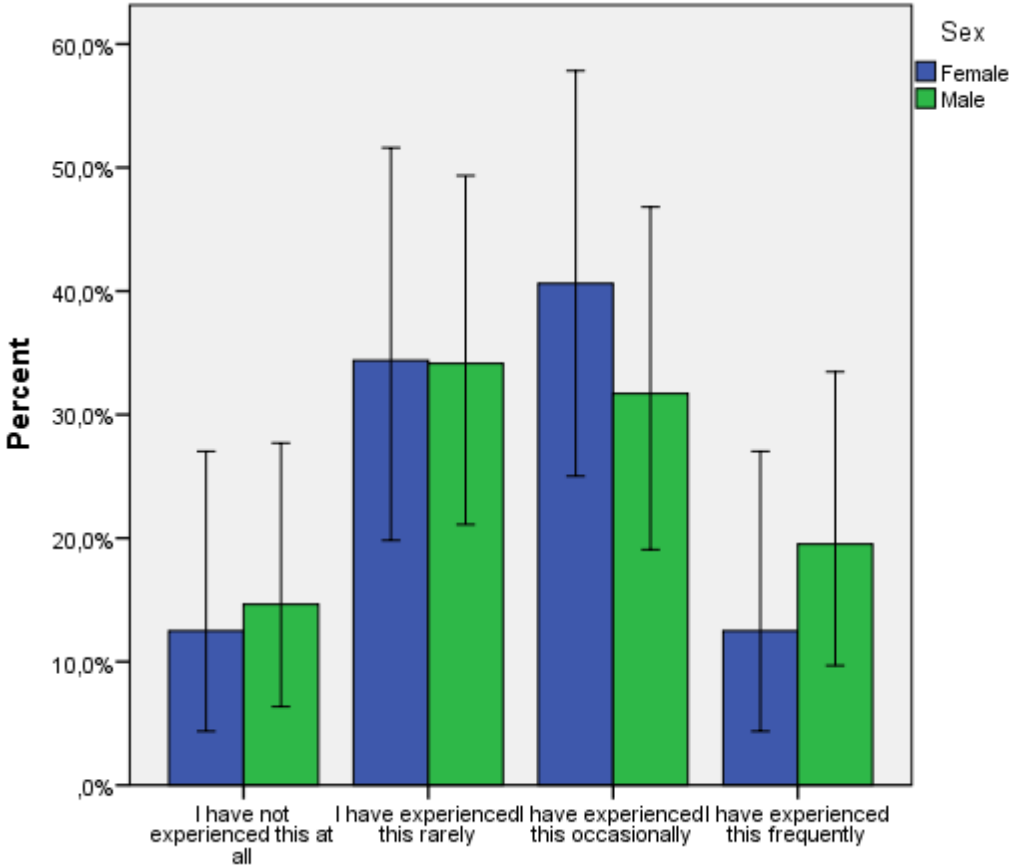
- No comments

Figure 35. I have sufficient financial resources to undertake my ALICE RAP work.



- ALICE RAP allowed us to undertake a project that would not have otherwise been feasible.
- the travel budget was far too limited - it ran out after the second year. Participation in subsequent meetings had to be funded from other sources.

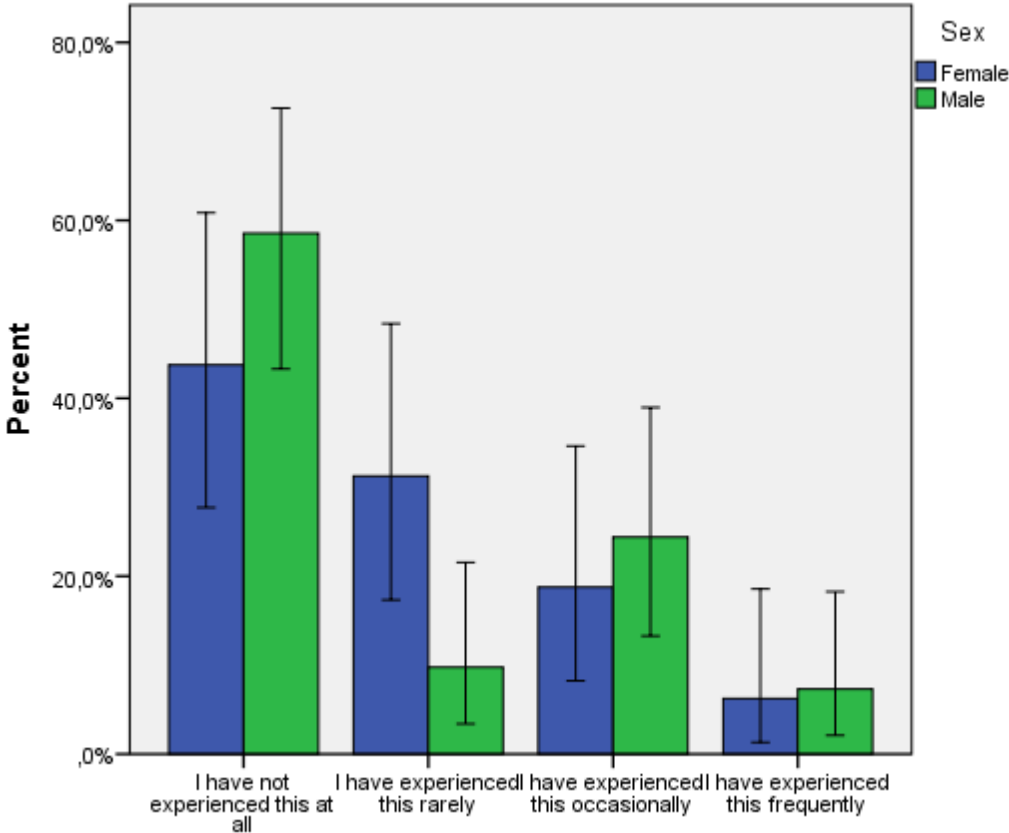
Figure 36. Others in ALICE RAP show interest in my work.



- No comments

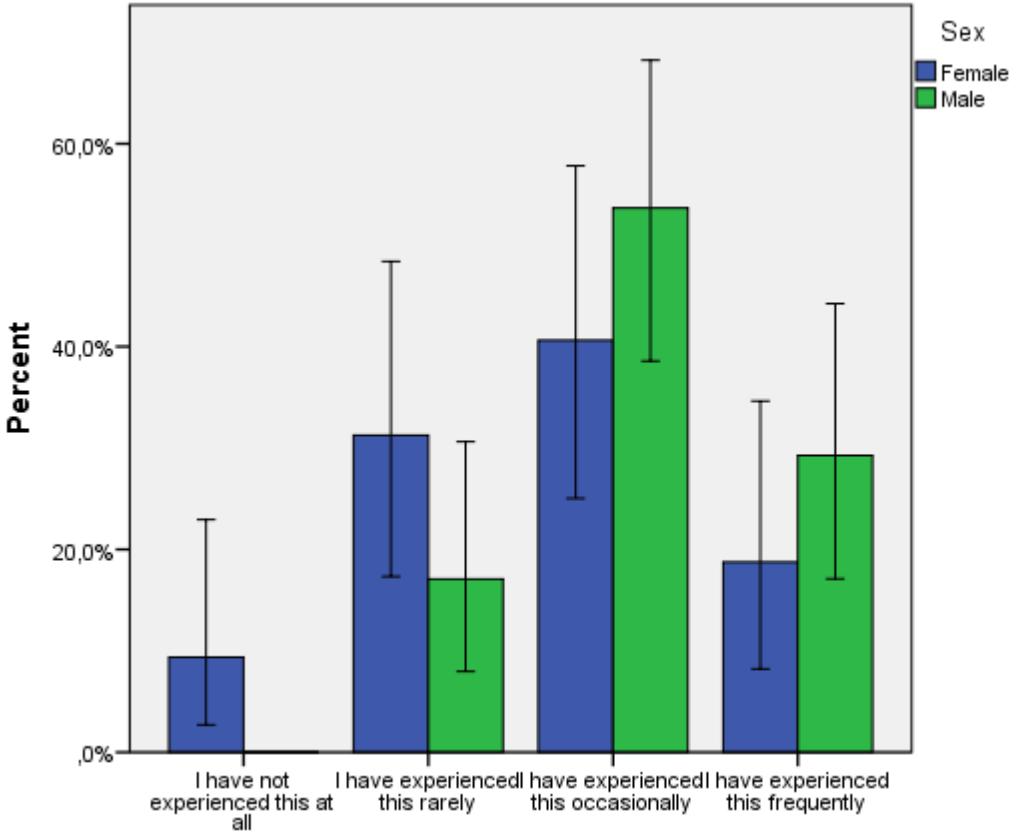


Figure 37. My attempts to collaborate across Areas have not been well received.



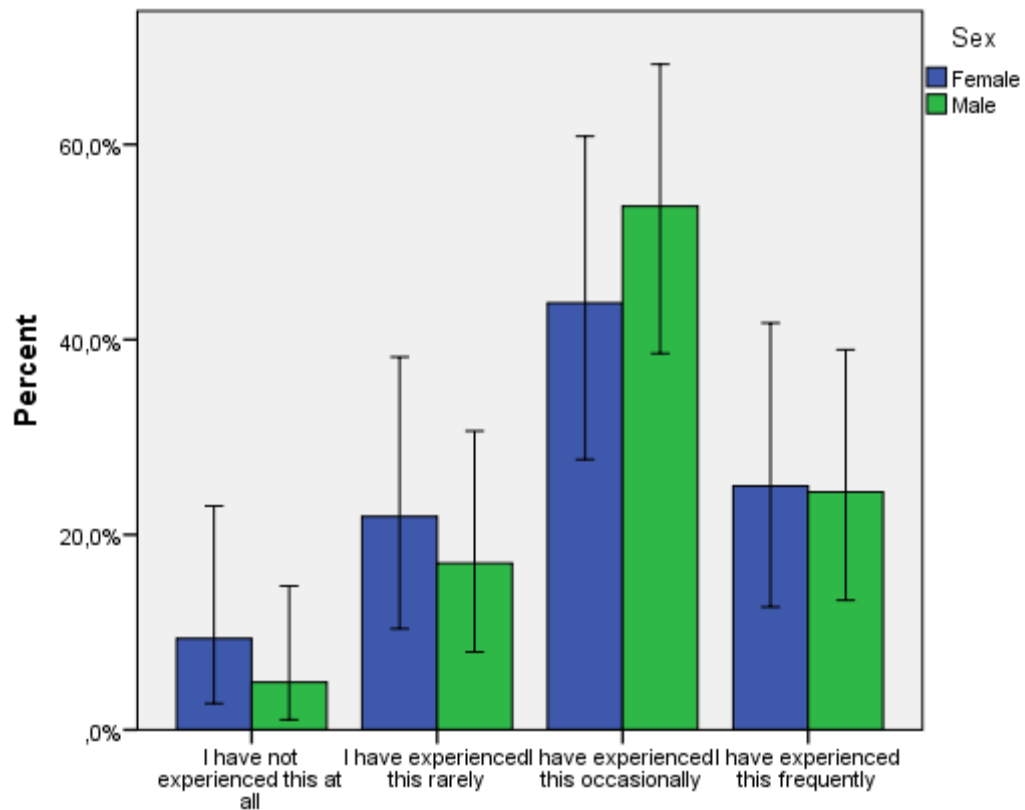
- From what I have seen there was not very much cross-area collaboration
- see comment above. When collaboration was suggested it was usually welcome but little came of it.

Figure 38. I feel welcome to offer my ideas about ALICE RAP science.



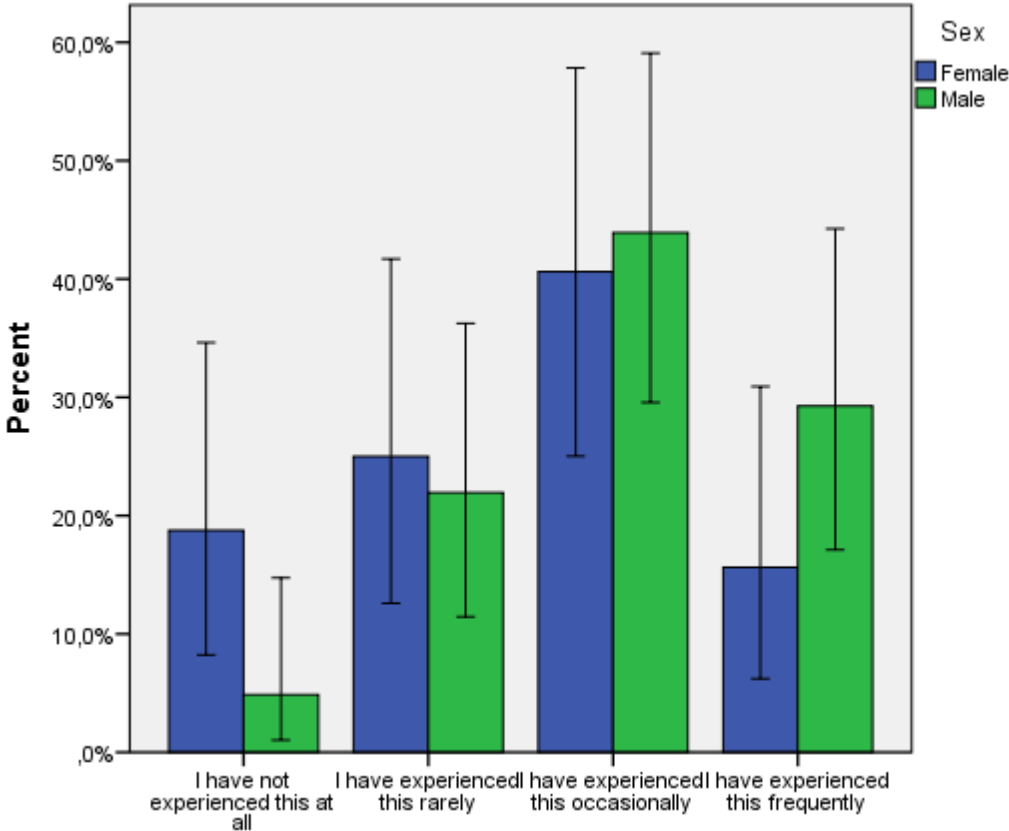
- to whom?

Figure 39. I have the possibility to propose improvements & new ideas at any level of working in ALICE RAP (WP, Area or project as a whole).



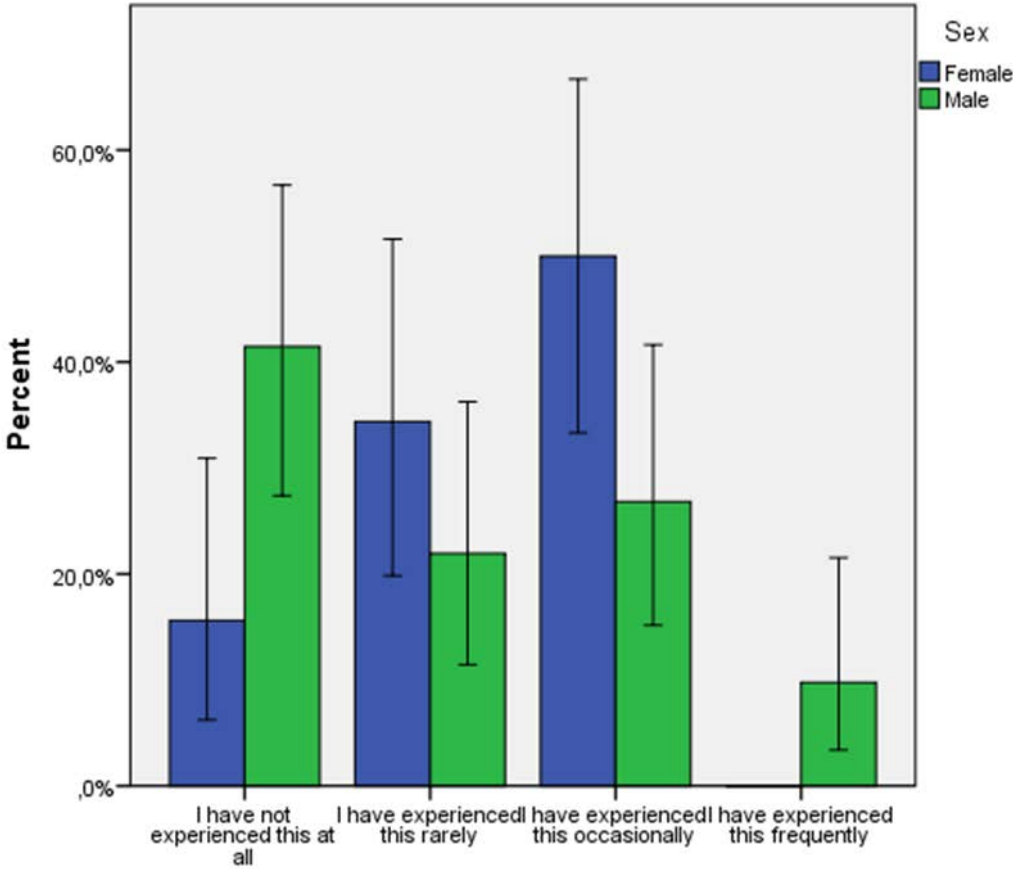
- Difficult to answer what are essentially attitudinal statements using responses relating to frequency! Response options should reflect degree of agreement, not frequency. This applies to all items in this question.
- The attitude of my WP coordinator and of the project was open and permissive. But actually the tasks were already predefined. My institution had a subcontract of one month. I was involved in tasks beyond my working group, in commenting texts or answering some questions. But in my understanding it was not a project of prospecting new points of views, relied on brainstorming or other consensus techniques but a project led by experts, implemented relied on the researchers working in the area.
- You need to have answer categories: not relevant, don't know because that is what all of the above are to me.

Figure 40. I feel welcome to offer my ideas about reframing addiction.



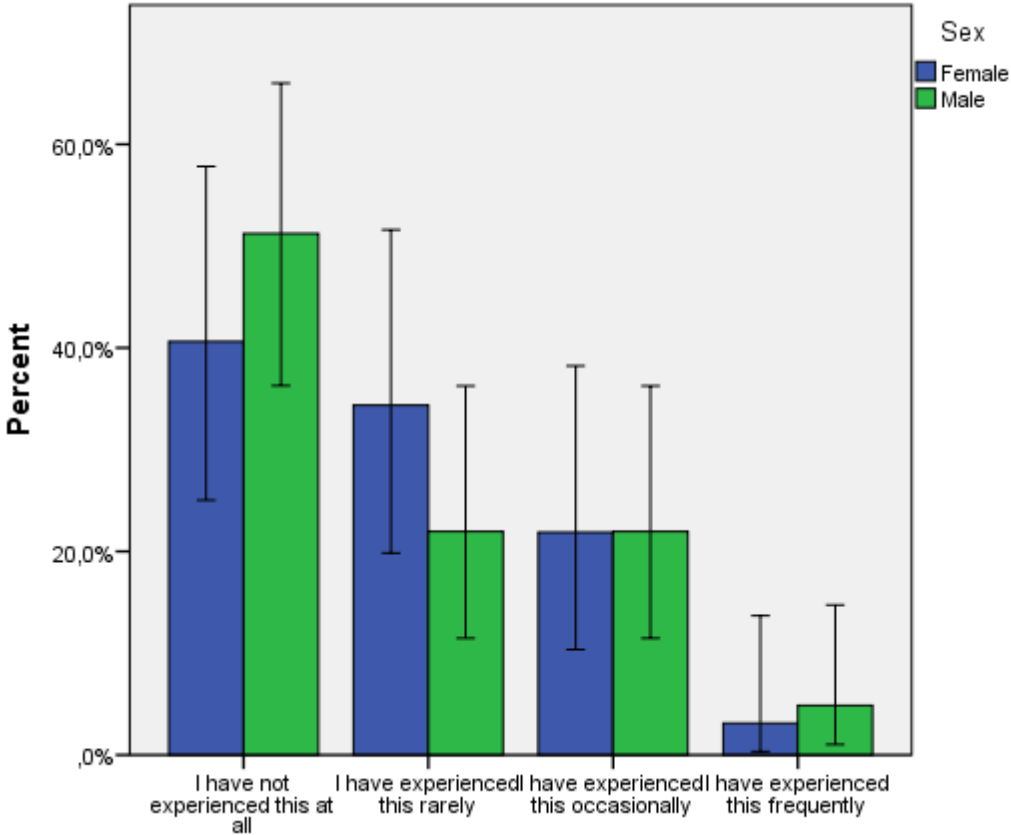
- I'm sure I would be but I don't think I was ever asked in these terms

Figure 41. Plenary ALICE RAP meetings have not been effective.



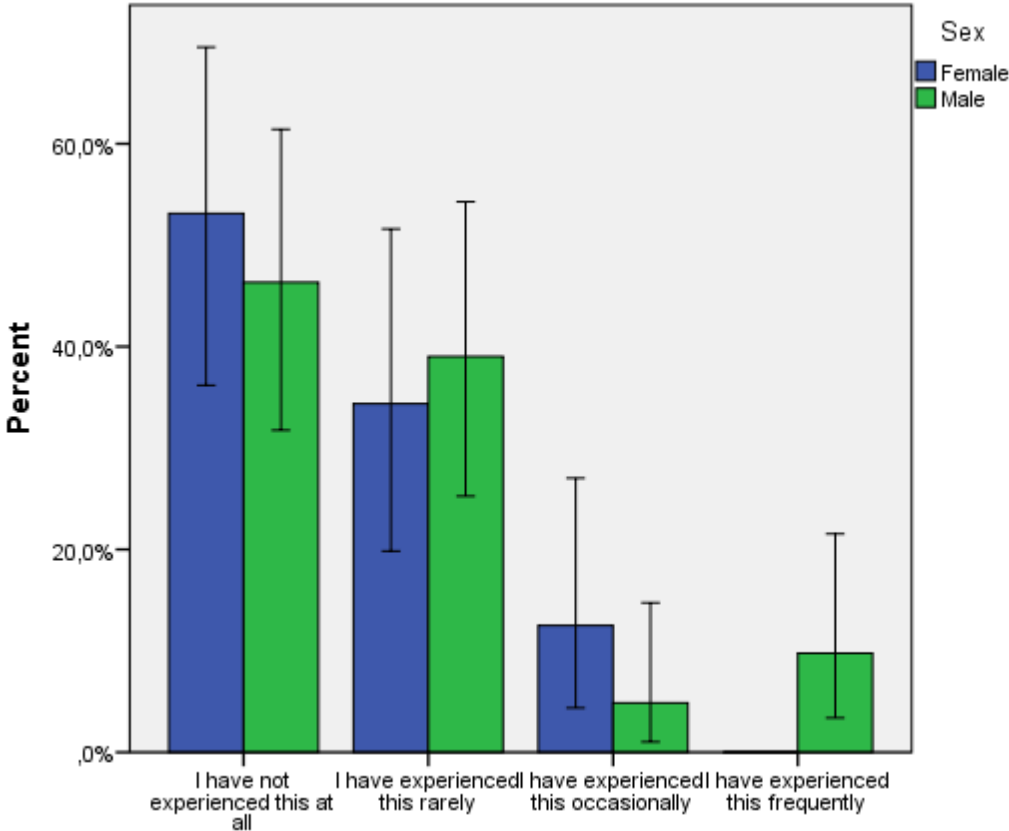
- I did not attend plenary meetings.
- Not sufficient time to have in depth discussions on relevant issues
- Usually a mixture of more and less useful elements

Figure 42. ALICE RAP leadership by the coordinating team has been too hierarchical.



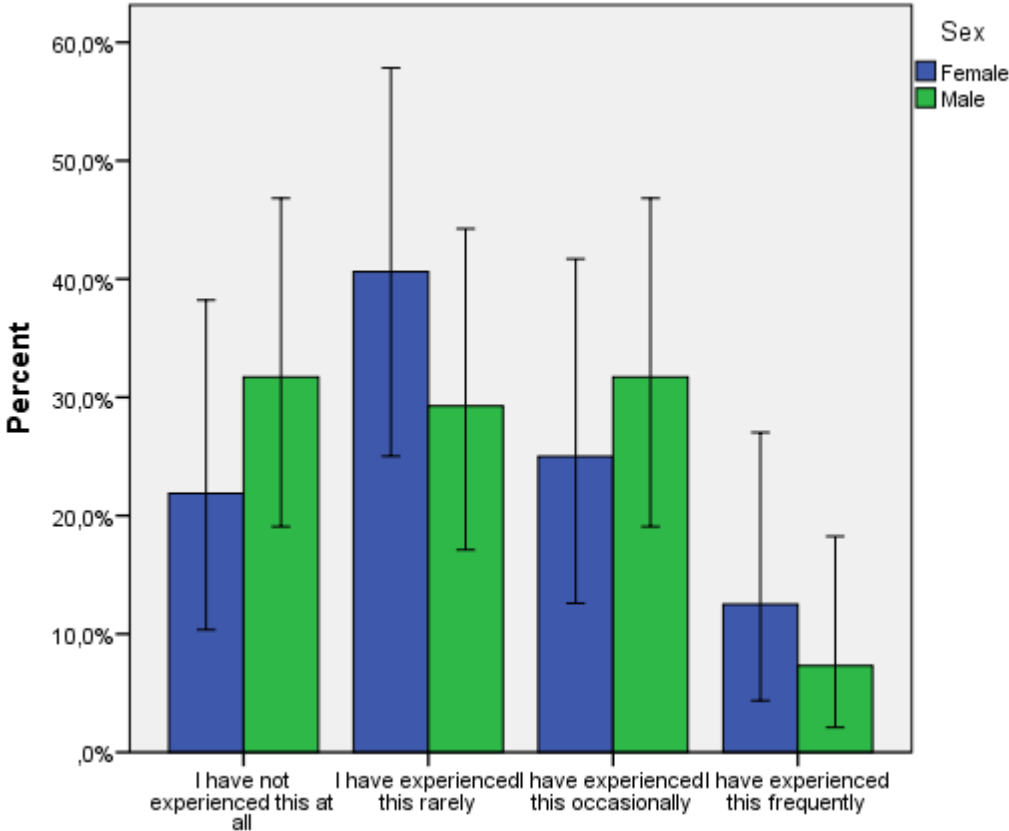
- Everybody was friendly, supportive. What actually means hierarchical in this context? Nobody told: I am the big boss; everybody listens to me, otherwise someone will get hurt. The sequence was information/proposal, time for comments, availability for any problem that could appear.
- It must be hierarchical in such a large project.

Figure 43. ALICE RAP's leadership by the coordinating team has been too diffuse.



- I do not get the meaning of diffuse here.

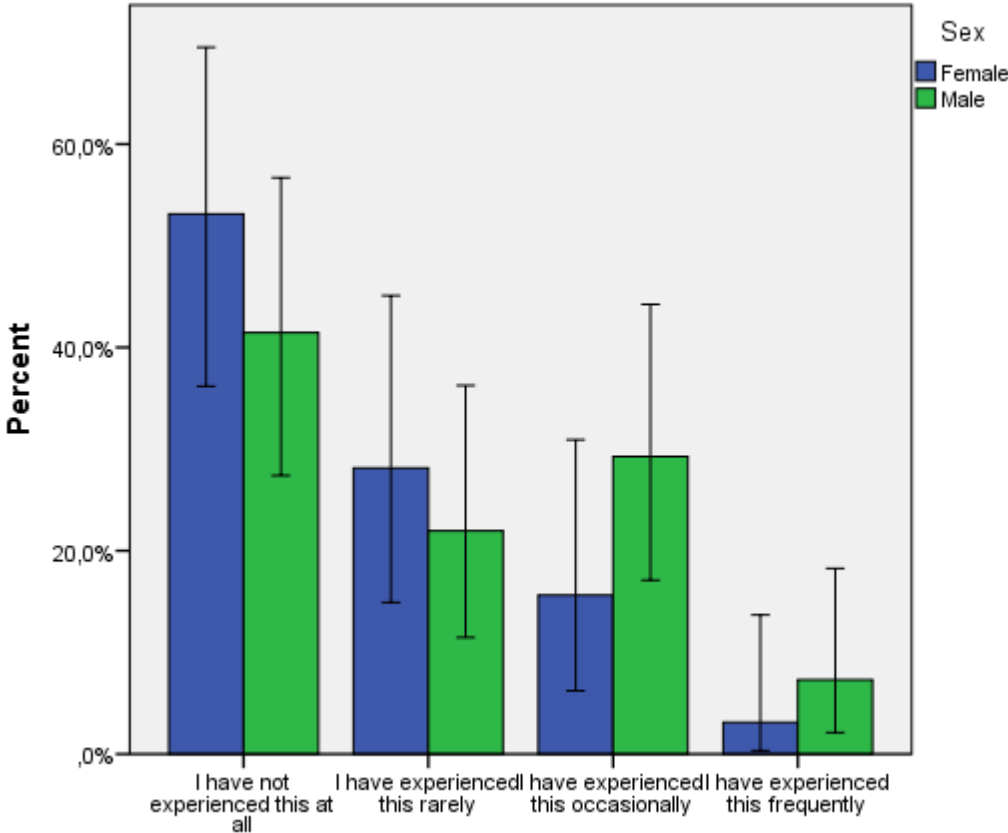
Figure 44. In ALICE RAP, too much power is concentrated in too few people.



- Power? Some people have an extensive expertise and what they do or tell is powerful. This is a power of knowledge, of science ... I am happy to be ruled by such power.

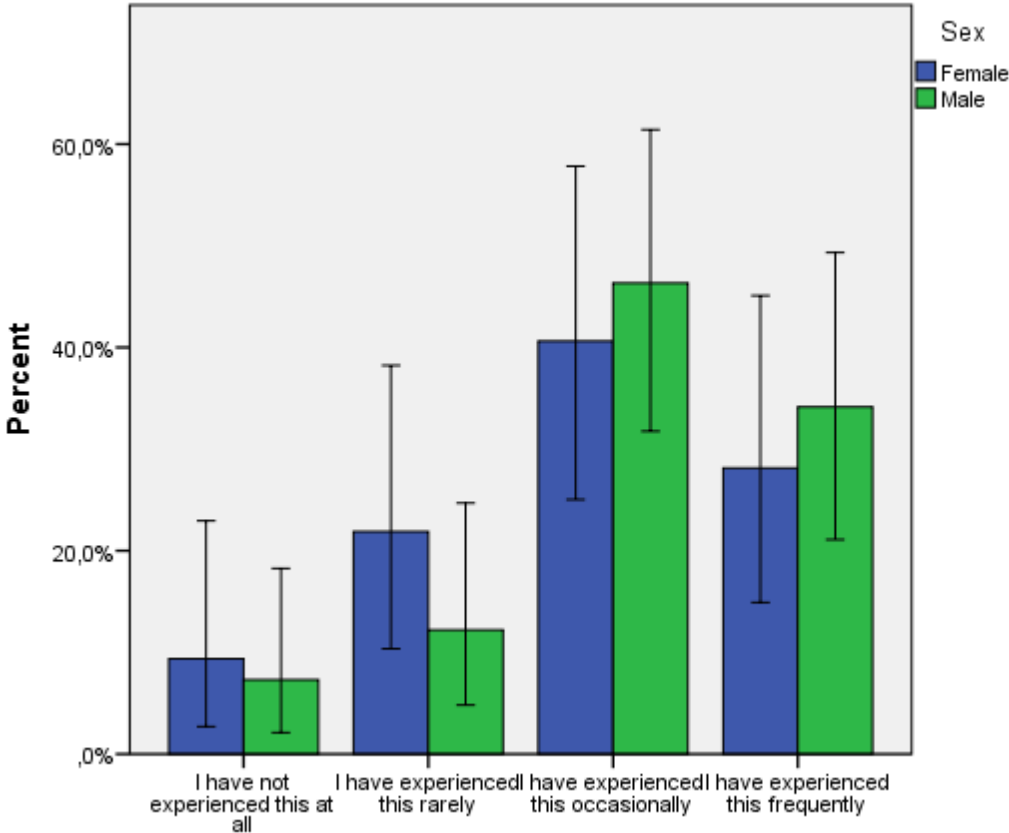


Figure 45. ALICE RAP communications from the coordinating team are infrequent and/or unclear.



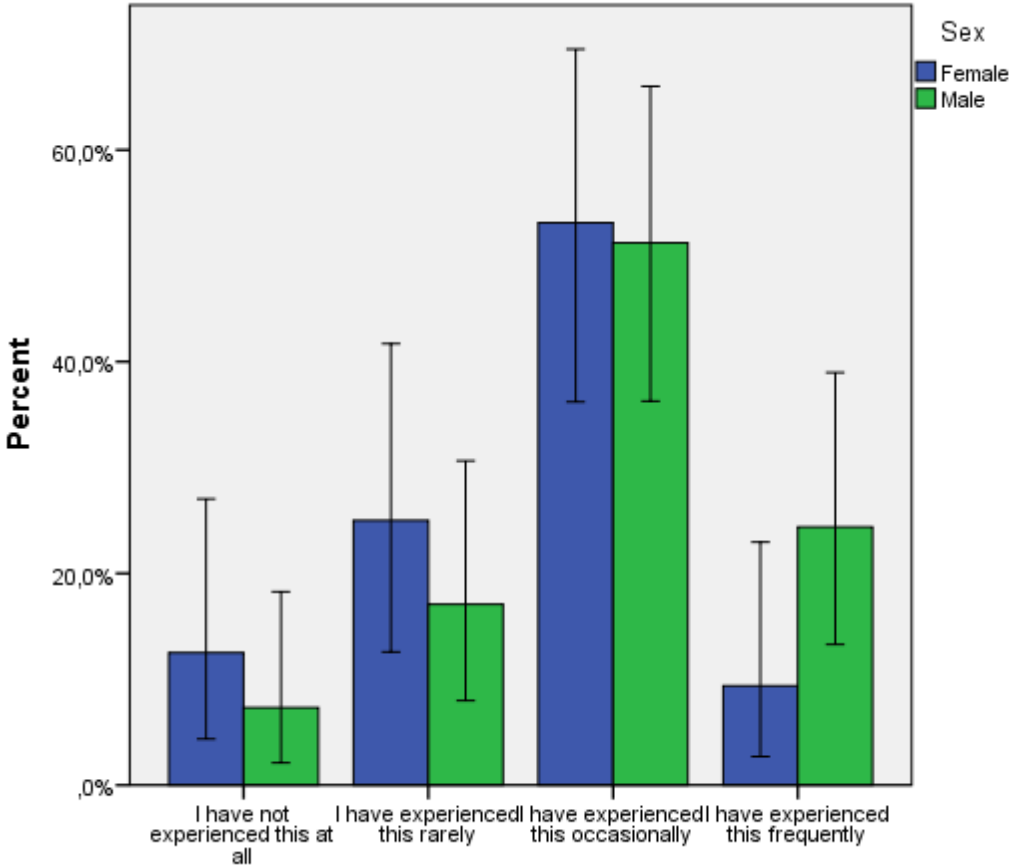
- ALICE RAP communications were sufficient and clear
- It was not the case either in my Working group or in others.

Figure 46. There is satisfactory communication within Work Packages.



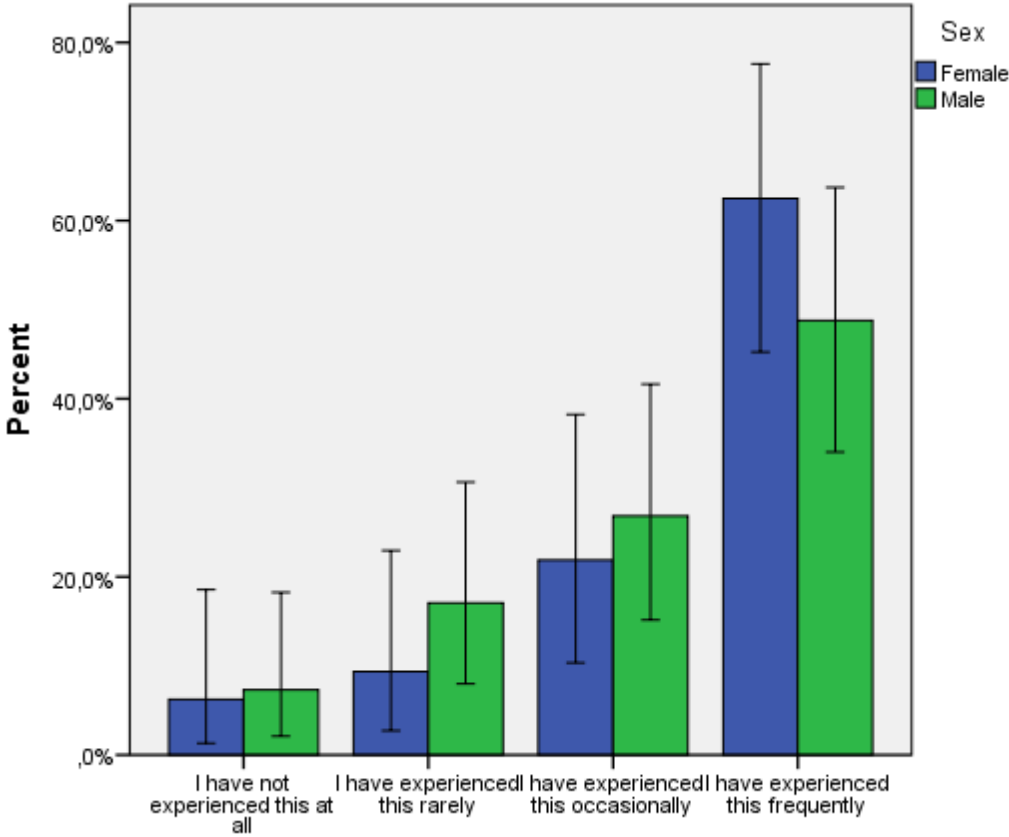
- No comments

Figure 47. There is satisfactory communication within Areas.



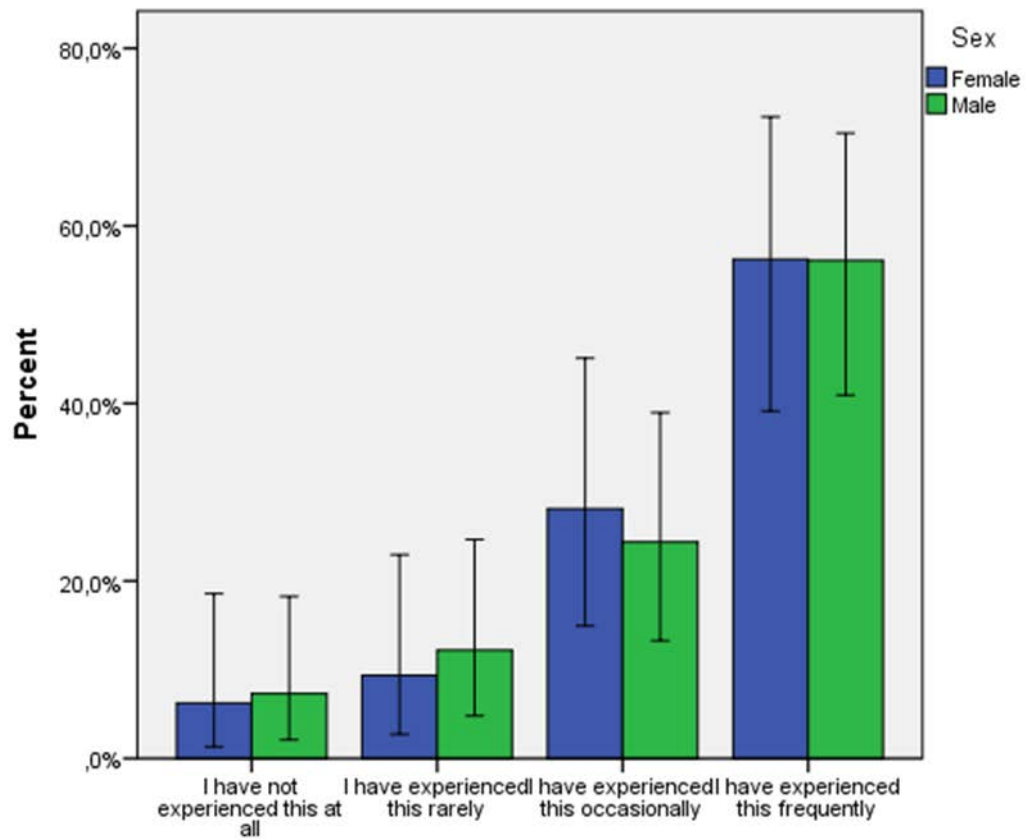
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- No comments

Figure 48. I have satisfactory communication with ALICE RAP's coordinating team.



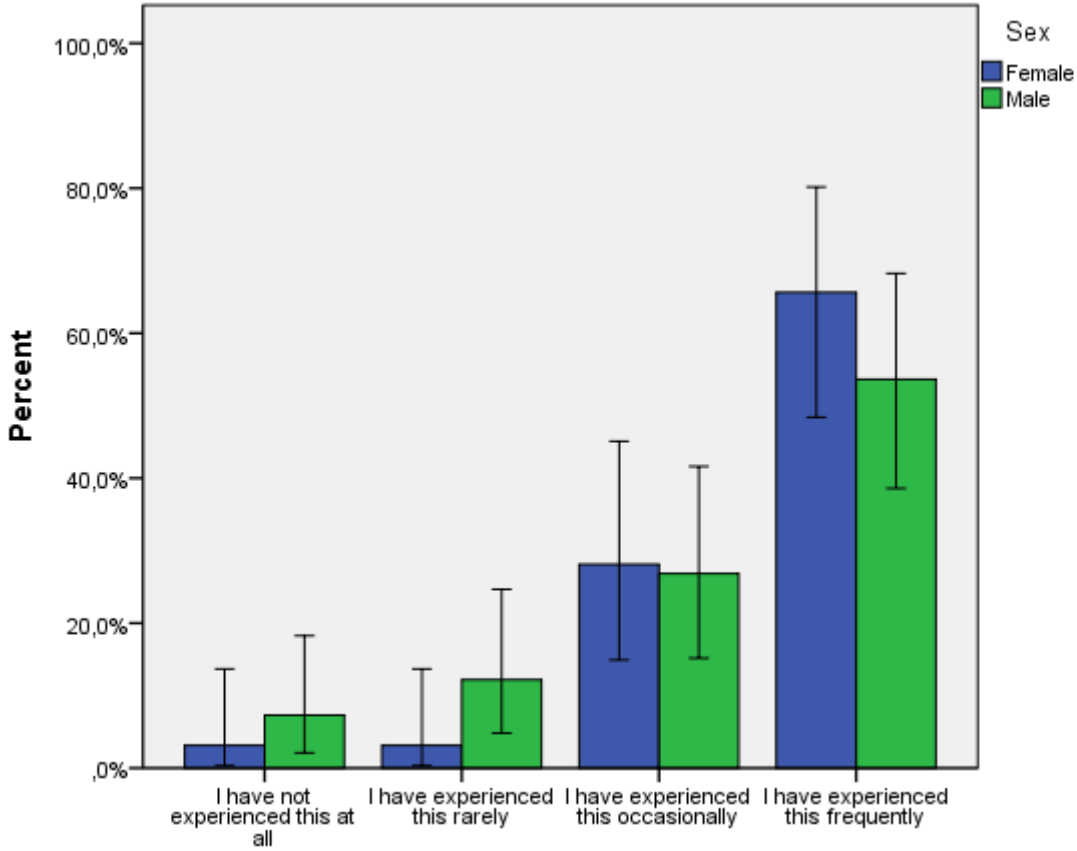
- No comments

Figure 49. There is a clear task distribution among ALICE RAP scientists within the Area that I mostly contribute to.



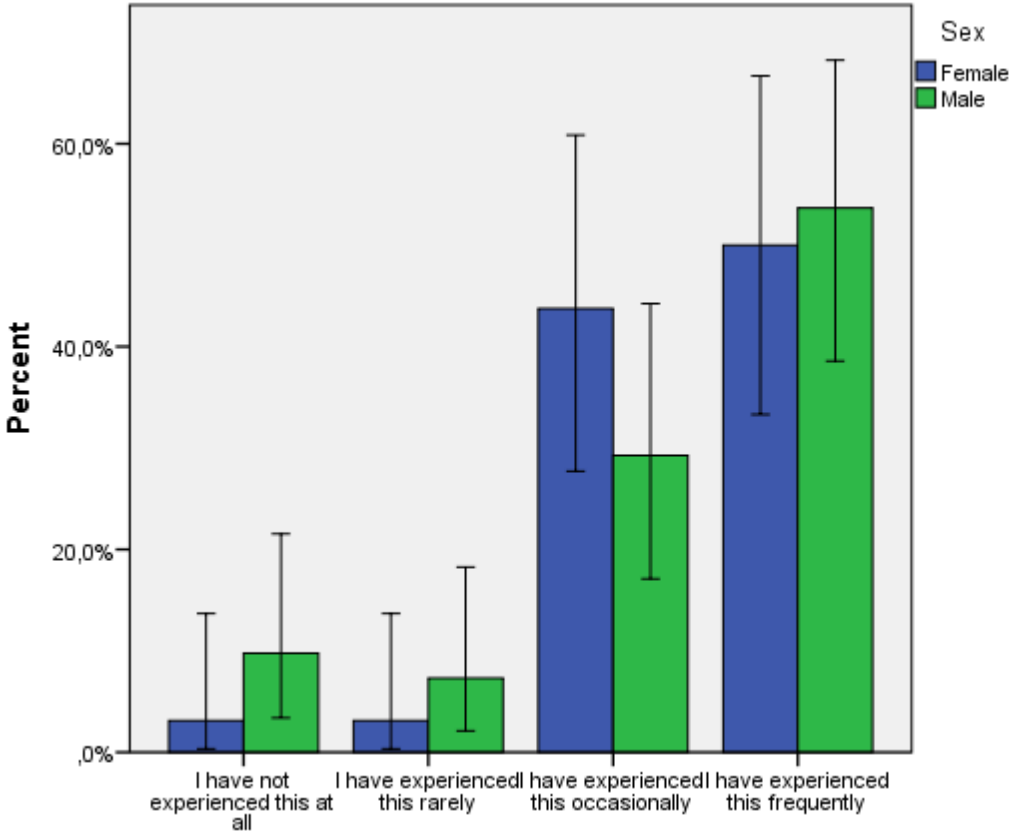
- Have used a little throughout to indicate ones that really don't apply to me
- There is a clear task distribution among ALICE RAP scientists within the Area that I mostly contribute to

Figure 50. The work schedule for the ALICE RAP tasks I am involved in is clear.



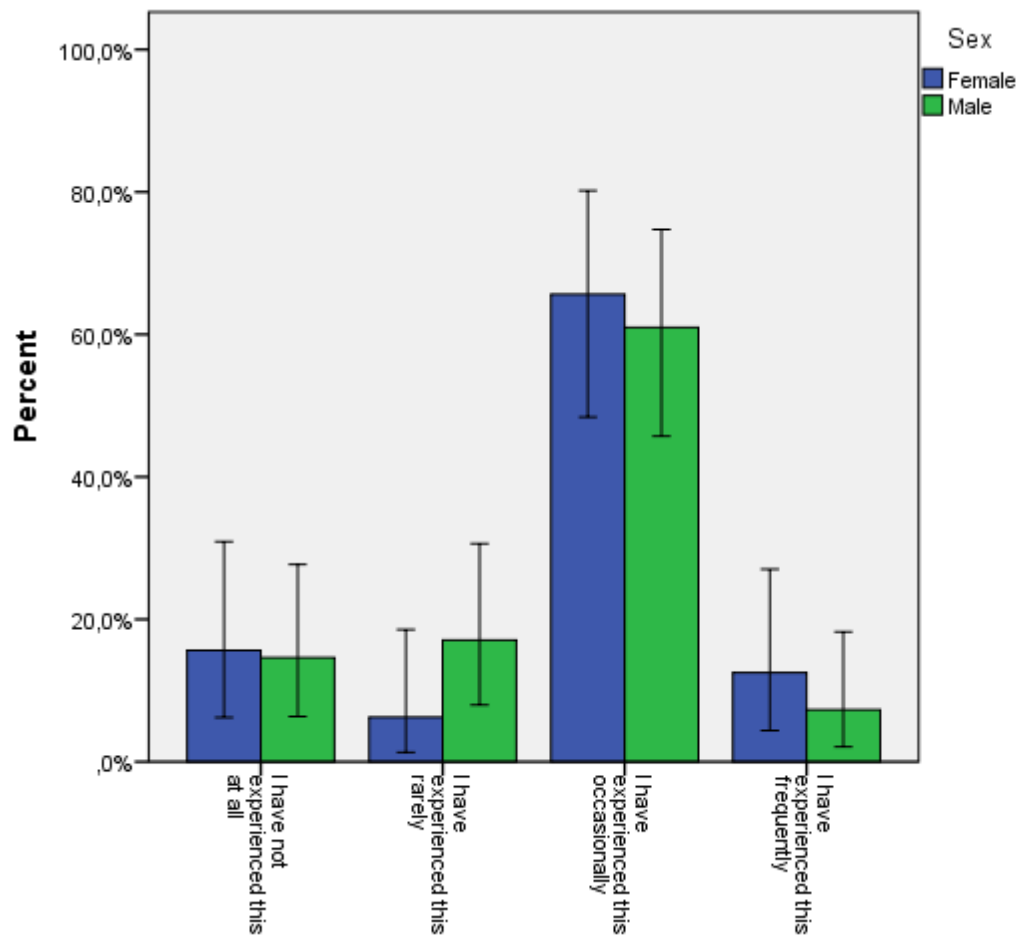
- It was clear with each task, but I did not know from the beginning how will go on (but I did not attend any meeting).

Figure 51. The deadlines for the ALICE RAP tasks I am involved in are reasonable.



- Some were too short.

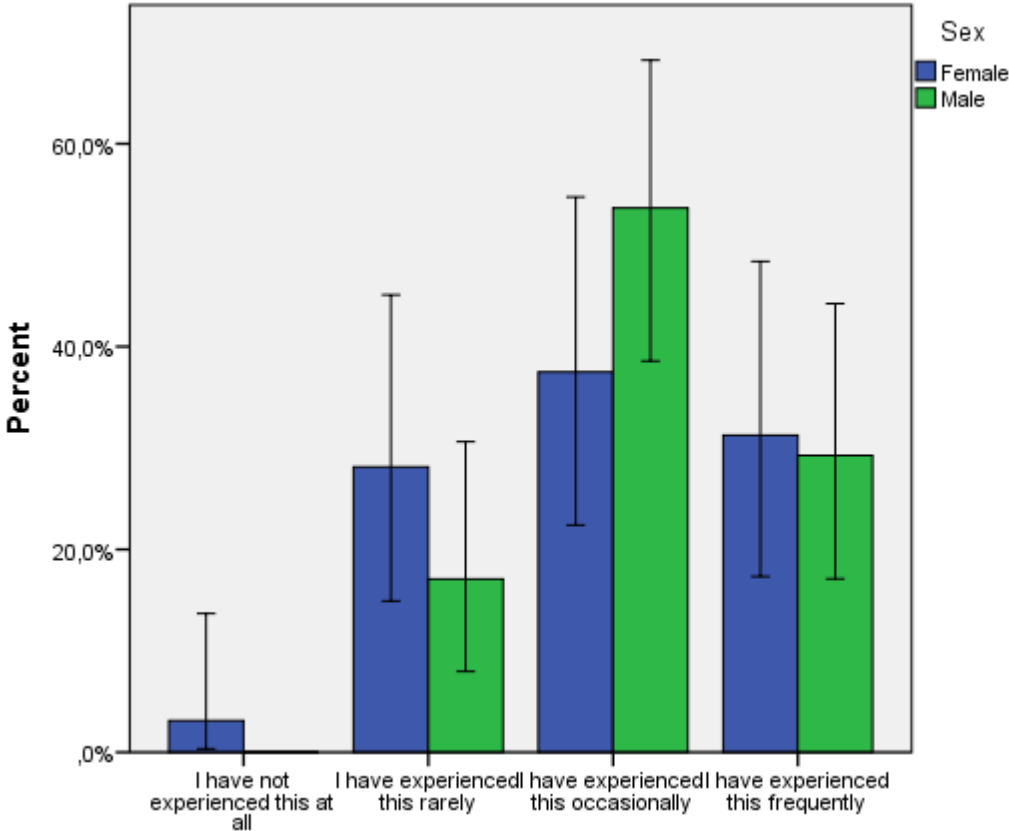
Figure 52. ALICE RAP as a whole has too many elements & is too complex.



- A lot of reports and interesting results have come out of this project. I'm not sure how well they are known within ALICE RAP network as well as outside.
- From whose point of view? It's difficult to explain to others, but that isn't necessarily a problem for the work itself.
- Indeed, I do miss the coherence of the total
- The size and complexity in itself is not a problem but there was too little opportunity/ money to really work across work areas/ WPs and this was a shame

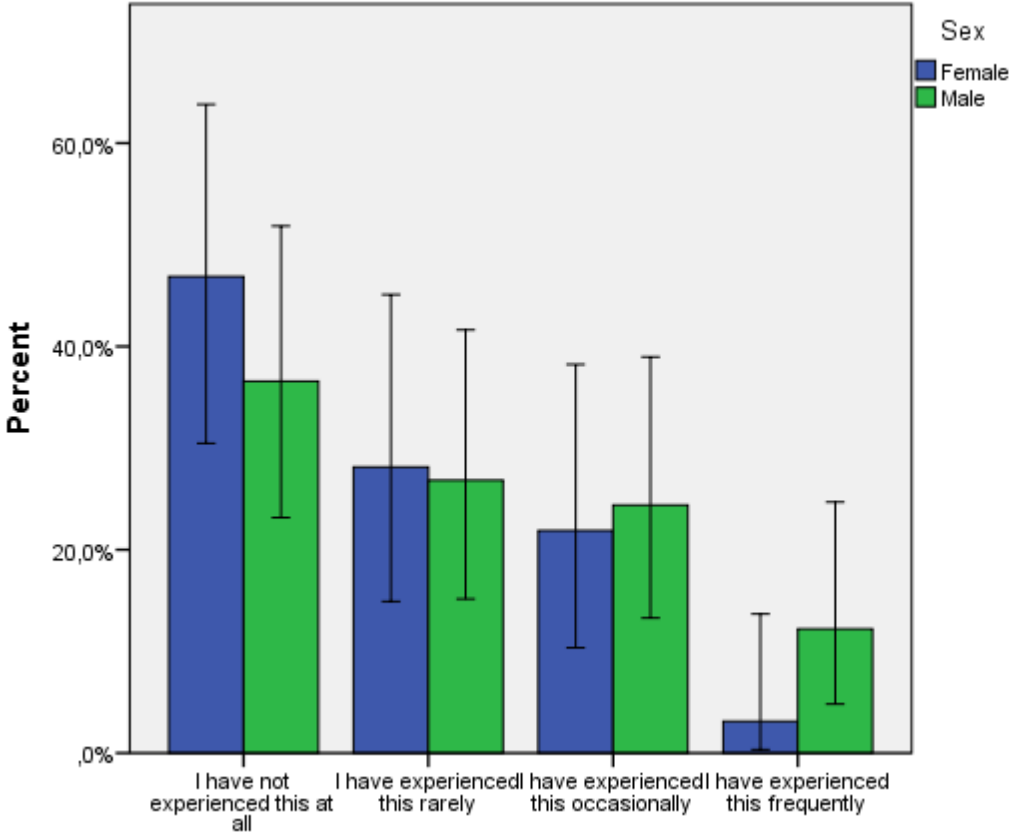


Figure 53. ALICE RAP as a whole has satisfactory problem-solving capacity & routines.



- No comments

Figure 54. I do not know the right channels through which to participate in ALICE RAP as a whole.



- No comments

Figure 55. Main topics raised in the fish bowl discussion ‘maintaining the momentum: planning the continuing project work’.

