Assessing the quality of mental health promotion and prevention in Croatia: the case of Istria

Josipa Mihic¹,*, Miranda Novak¹, Clemens Hosman², and Celene Domitrovich³

¹Faculty of Education and Rehabilitation Sciences, University of Zagreb, Zagreb, Croatia, ²Emeritus Professor of Mental Health Promotion and Prevention at Maastricht University & Radboud University Nijmegen, Nijmegen, Netherlands, and ³Prevention Research Centre, Penn State University, Penn State, USA

*Corresponding author. E-mail: Josipa.mihic@erf.hr

Summary

While the availability of mental health promotion and prevention programs worldwide is growing, there is divergence in their level of effectiveness that has led to increasing interest in the development of ‘effect management’ strategies. Mental health promotion and prevention science and practice has a relatively young history in Croatia, but major investments towards its development have been made over the last decade. This paper reports on a research project that took place within the Istrian Region. The long-term goal of the initiative is to establish quality assurance indicators for mental health promotion and prevention interventions. The current study involved adapting the Dutch Prefi instrument for use in Croatia. The Prefi reflects the literature regarding research-based effect predictors. An instrument allows users to assess whether programs have been designed and implemented in ways that maximize their ability to be effective. The Prefi scores can be used for improving a program and the quality with which it is implemented. The first aim of the study is to determine if independent researchers can use the Prefi reliably as a quality assessment instrument. The second aim is to use the Prefi to describe the quality of one cohort of mental health promotion and prevention programs. The study represents the first steps toward developing a strategy for quality assurance that strengthens community capacity for effective service delivery and that could inform other countries whose mental health promotion and prevention efforts are in early stages of development.

Key words: mental health promotion and prevention, quality assessment, quality assurance, intervention effectiveness

INTRODUCTION

Over the past three decades, mental health promotion and prevention science has expanded significantly. Based on epidemiological research and well-grounded theory, a number of high-quality interventions have been developed and tested in well-controlled efficacy trials which have led to a science of mental health promotion and prevention (Mrazek and Haggerty, 1994; Kellam and Langevin, 2003; Botvin, 2004). The World Health Organization has given promotion and prevention efforts high priority on its agenda (Hosman et al., 2004; Herman et al., 2005, Barry, 2008) and the importance of mental health is reflected in health policies of Western European countries (e.g. Mental Health Strategy for Scotland 2012–2015), the USA, Canada (e.g. GermAnn and Ardiles, 2009) and Australia (Australia’s National Mental Health Policy, 2009).
Advocacy has led to increased funding for practice and research in these domains, and to nation-wide strategic support (e.g. policy, databases, and training) in many countries.

Determinants of an intervention’s impact or effect are referred to as ‘effect predictors’ or ‘effect moderators’ (Hosman, 1994; Hosman and Engels, 1999; Raphael, 1999). These factors include, for instance, characteristics of the intervention itself (e.g. duration, methods, sociocultural relevance) and the fit between the program and the population it targets (Stice et al., 2007). Programs that have clear goals and objectives, and that are theory-based in terms of both, the targeted risk and protective factors and the mechanisms of change used in the intervention program, have bigger chance of positive outcomes (Kok et al., 1997; Tobler and Stratton, 1997; Jané-Llopis and Barry, 2005). Comprehensive programs that utilize a variety of methods and that are delivered at the appropriate time are also more successful (Jané-Llopis et al., 2003; Nation et al., 2003). Jané-Llopis and Barry (Jané-Llopis and Barry, 2005) stress that training and supervision of program providers and infrastructural support from management predict higher program effectiveness. Nation et al. (Nation et al., 2003) have identified nine characteristics that were consistently associated with effective prevention programs across four areas – substance abuse, risky sexual behavior, school failure and juvenile delinquency and violence. According to their findings, effective programs were: (i) comprehensive, (ii) included varied teaching methods, (iii) provided sufficient dosage, (iv) were theory driven, (v) provided opportunities for positive relationships, (vi) were appropriately timed, (vii) were socio-culturally relevant, (viii) included outcomes evaluation and (ix) involved well-trained staff.

General principles gleaned from effective interventions may help mental health promotion and prevention practitioners to select, modify or create more effective programs. Speller, Evans and Head (Speller et al., 1997) stress that not enough attention is given to quality assurance in mental health promotion and prevention in order to maximize program effectiveness. This can be solved through the application of quality assurance strategies, such as a systematic planning approach (Kok et al., 1997; Bartholomew et al., 2001) and the use of effectiveness guidelines based on knowledge of evidence-based effect moderators (Hosman and Engels, 1999; Nation et al., 2003; Molleman et al., 2005a). Bartholomew, Parcel and Kok (Bartholomew et al., 1998) describe Intervention mapping approach for development of interventions while in their work in 2001 the same authors suggest that the effect of an intervention can be much higher when theoretical and empirical knowledge about effect predictors is systematically applied to the process of intervention development and implementation.

In order to develop more effective interventions, professionals need to be informed and trained in incorporating most recent knowledge on effect predictors into their programs. Besides providing education and training to professionals, quality assessment instruments and checklists could also be used as a tool of ensuring effect predictors incorporation in mental health promotion and prevention interventions.

Quality assessment and quality assurance in mental health promotion and prevention

Quality is a term that is used in mental health promotion and prevention in a variety of ways even though it is not precisely defined. Kok and colleagues (Kok et al., 1997) elaborate the term ‘quality’ very broadly. They emphasize that the quality of the intervention is the only and the most important determinant of the intervention’s effectiveness. More precise and generally accepted explanation of the term ‘quality’ is the one in which quality represents the level to which key effect predictors are incorporated into an intervention. Measurement of the presence and quality level of effect predictors in the intervention is known as quality assessment process. Ader and colleagues (Ader et al., 2001) stress that the concept of quality assurance is a broader concept and that it encompasses methods for describing, measuring, evaluating and, when needed, taking measures aimed at the improvement of what, in a broad sense, is described as intervention’s quality. Quality assessment tools that monitor key effect predictors associated with positive outcomes are critical for ensuring that evidence-based interventions achieve the same impact when they are used in communities on a regular basis. These tools can become part of quality assurance strategies or quality assurance processes if they are used to guide the development of interventions, to assess the extent to which ongoing interventions adhere to quality standards, or to identify targets for quality improvement of interventions that are already being implemented. Funders can also use them to select future projects to be financed.

As described previously, outcome research provides the knowledge necessary to identify predictors of efficacy and effectiveness in mental health promotion and prevention programs and implementation. As such, these are the most logical indicators of quality. Examples of the translation of effect predictor research into tools for quality assurance are found in the USA and some Western European countries (Aro et al., 2005). For example, the RE-AIM framework developed in the United States (Glasgow et al., 1999) and the Preffi instrument developed in the Netherlands (Molleman et al., 2005a,b) are designed to promote the systematic application of evidence-based principles that are associated
with higher quality interventions and better outcomes (Molleman et al., 2005a,b).

The goal of this paper is to present the results of research and validation of Preff 2.0 instrument in Croatia in order to examine if valid Preff 2.0 instrument could be used as a system of criteria or guidelines for programs’ quality improvement.

Prevention in Croatia

The current approach to addressing mental, emotional and behavioral problems in Croatia parallels the broader movement in the field toward promotion and prevention. This effort began twenty years ago with a group of scientists studying criminology, juvenile delinquency, and behavioral disorders of children and youth (Poldruča et al., 2011). The shift away from treatment began in the public health sector in the early nineties and gained momentum when the University of Zagreb’s Faculty of Education and Rehabilitation Sciences and other scientific organizations from Croatia have started a collaborative relationship with prevention research centers in the United States and Europe. Besides interventions developed in Croatia, several evidence-based prevention programs were adopted from abroad and researched in Croatia. Implementation of the Communities that Care model began in 2002 in the Croatian region of Istria (Bašić et al., 2007a,b) and the Northland Project was implemented by the public health sector the same year in the city of Split within the international Healthy Cities Network (http://www.euro.who.int/en/health-topics/environment-and-health/urban-health/activities/healthy-cities/who-european-healthy-cities-network). The Life Skills Training Program was initiated in the city of Rijeka’s schools by Public Health Institute of Primorsko-Goranska County in 2005 and the Promoting Alternative Thinking Strategies (PATHS; Greenberg et al., 2003) curriculum was brought to schools since 2008 (Bašić and Grozić-Živolić, 2010). Based on these investments in prevention, in 2008 the University of Zagreb’s Faculty of Education and Rehabilitation Sciences initiated an international doctoral program focused on prevention and promotion in mental health (Doctoral program ‘Prevention science: prevention of mental and behavioural disorders and promotion of mental health’ has been initiated by Josipa Bašić, retired professor of prevention at the Faculty of Education and Rehabilitation Sciences, University of Zagreb).

Despite the use of several evidence-based programs in Croatia, science-based prevention practice still faces many challenges (Bašić, 2009). Most of the programs are not theory-based and outcomes are rarely evaluated (Bašić, 2009; Bašić et al., 2010). In some cases, programs are developed by practitioners who are not trained in prevention. Country lacks a national database for evidence-based promotion and prevention programs like those that exist in the United States, Netherlands, and Norway. The lack of an infrastructure for prevention and an unfinished national reform of the system of social services, limits current efforts to strengthen prevention science and practice. While there are high-quality policies concerning the well-being of children, youth and families (e.g. the National strategy for prevention of behavioural disorders of children and youth), these policies are not implemented consistently in practice. The primary challenge appears to be a lack of coordination between the institutions, activities, and stakeholders concerned with positive child development. There is also a lack of transparency about institutional practices and a lack of clarity of responsibilities in this field. Described conditions are suggesting a need for structural and organizational changes of which one might be a foundation of national institute for mental health promotion and prevention in Croatia. Such an institute could serve as an ‘umbrella’ organization which could supervise mental health promotion and prevention policies and interventions in order to assure their quality and effectiveness. The results of a study which will be presented in this paper might also contribute in advocating and initiating the establishment of that kind of organization in the future.

A process of quality assurance of mental health promotion and prevention in Croatia

Given these contextual factors, members of our research team decided to develop a national laboratory for prevention research, practice and policy in Croatia by concentrating their efforts in a part of the country that would offer the best conditions for success. Istria is one of the better-developed and more prosperous regions situated in the west part of the country, bordering Slovenia. In 2002, the local authorities of this region in the Department of Health and Social Care (DHSC) who had funded the CTC initiative began a long-term collaboration with the University of Zagreb (Bašić et al., 2007a,b). The primary goal of this collaboration was to develop strategies to apply science-based principles of prevention in community settings and to invest in the development of an organizational system that would support prevention. Special attention was given to building the capacity of the nonprofessionals working with children and youth using a combination of bottom-up and top-down principles.

The DHSC strives to systematically develop prevention by financing programs of non-governmental organizations provided by local practitioners. In 2002, the DHSC
initiated a systematic procedure for allocating these funds based on an application process and financed 11 prevention projects. Initially, the criteria for financing were that proposals provided a solution to a particular problem and that the services were offered broadly within the community (Bašić et al., 2007a). In 2004, 27 projects were financed and this expanded to 32 projects in 2006. Over time, as the demands for quality, accountability, and sustainability grew, the DHSC realized that this approach was limited in its ability to impact the quality of services and the outcomes for children and families. Through their collaboration with the University of Zagreb and international research centers, the DHSC became aware of the research on effect predictors. To select programs with the greatest potential for success, the DHSC began including other quality criteria for proposals. These included: (i) clear and specific program goals, (ii) firm organizational structure for program implementation, (iii) partnership with other organizations in the community, and (iv) the involvement of volunteers. The program developers and deliverers were responsive to these criteria and the quality of applications improved. As a result, DHSC was open to using an even more comprehensive set of research-based quality criteria to guide their funding decisions. This led to the initiation of the current study and the use of the Preffi 2.0 instrument as part of a comprehensive quality assurance process.

The current study
The current study has two aims. The first is to adapt the Preffi 2.0 (Molleman et al., 2005a, b) for use in Croatia and to determine whether it can be used reliably by independent researchers to rate the quality of one cohort of programs funded by DHSC. The second aim is to describe the quality of prevention programming in Istria as assessed by this new version of the Preffi.

This study is a part of more comprehensive research project of the University of Zagreb to validate the Preffi 2.0 so that it can be used as a quality assurance instrument that will enhance mental health promotion and prevention development and practice in Croatia. That wider research includes a study of the impact of effect management training for the program providers in Istria that was designed to improve programs’ quality and to improve the mental health and social outcomes of the programs (Mihic, 2013; Novak, 2013).

METHOD
Participants
In order to describe the quality of mental health promotion and prevention practice in one region, it is important to study a representative sample of community-based programs. Those included in the current study were drawn from the 2011 applicants for financial support from the DHSC initiative entitled ‘Prevention of Behavioural Disorders and Prevention of Substance Abuse.’ A total of 30 applications were received by the Department but only 24 projects that focused on mental health promotion and prevention of mental, emotional and behavioral problems were eligible to be included. Six treatment programs were excluded. As shown in Table 1, the final sample included parenting interventions, socio-emotional learning programs, programs designed to prevent alcohol and drug abuse, mentoring programs, peer-focused violence prevention programs, and resilience promotion programs. The applicants include organizations such as non-governmental organizations, members of Healthy cities initiative and local organizations providing services for children and families while activities are implemented mostly by local psychotherapists, psychologists and other experts. Most of the programs were financed by the DHSC for several years which suggests that they were typical for the region.

Procedure
The English version of the Preffi 2.0 was translated into Croatian and the Croatian version was translated back into English and checked by the original designers of the Preffi. The scoring of Preffi clusters per each program was based on the written proposal that was submitted with the application for funding. The DHSC application form is standardized and contains 13 sections that are completed by applicants. It includes questions about the organizations previous experience, a description of the outcomes targeted by the intervention, the community needs assessment, goals and targeted results of the project, description of participants and activities, evaluation of efficiency, planned staff, partners and volunteers as well as the planned budget. The form is supplemented with a structured questionnaire about organizational issues and internal communication.

Each program’s proposal to the DHSC was read by three independent assessors (i.e. the first two authors of this paper and a doctorate-level researcher in prevention science) who rated it using Preffi 2.0 questionnaire (Molleman et al., 2005b). After the independent assessments were complete, the team compared their results, discussed any discrepancies and agreed upon a final rating. After the total scores for each project were calculated by each of the 3 independent assessors, internal consistency scores were computed.
**Table 1: Details on organizations and projects of mental health promotion and prevention from the region of Istria included in the study**

<table>
<thead>
<tr>
<th>Name of the project</th>
<th>Program content</th>
<th>Participants</th>
<th>Level of prevention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counselling center for kids, adolescents and family</td>
<td>Assertiveness training using theater techniques</td>
<td>Children and adolescents</td>
<td>Universal</td>
</tr>
<tr>
<td>Mentor program ‘Give me 5!’</td>
<td>Mentor program promoting positive relationships</td>
<td>Children from 7 to 15 years old</td>
<td>Universal/Selective</td>
</tr>
<tr>
<td>Supporting parenting</td>
<td>Parent training program</td>
<td>Parents of preschool children</td>
<td>Universal</td>
</tr>
<tr>
<td>Media literacy program</td>
<td>Program for prevention of cyber-bullying</td>
<td>Elementary school children</td>
<td>Universal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Children from 5th grade</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers and school counselors</td>
<td></td>
</tr>
<tr>
<td>Easier through school</td>
<td>Program for academic support</td>
<td>Children with learning difficulties from 7 to 14 years old</td>
<td>Selective/indicated</td>
</tr>
<tr>
<td>Program of substance abuse prevention for parents</td>
<td>Substance abuse prevention program</td>
<td>Parents of high-school children</td>
<td>Universal/Selective</td>
</tr>
<tr>
<td>Program of substance abuse prevention for teachers</td>
<td>Substance abuse prevention program</td>
<td>High-school teachers</td>
<td>Universal/Selective</td>
</tr>
<tr>
<td>Quality parenting course</td>
<td>Parent training program</td>
<td>Parents</td>
<td>Universal</td>
</tr>
<tr>
<td>Let’s grow up together</td>
<td>Parent training program</td>
<td>Roma parents</td>
<td>Selective</td>
</tr>
<tr>
<td>Successful parenting</td>
<td>Parent training program</td>
<td>Parents of elementary and high school children</td>
<td>Universal</td>
</tr>
<tr>
<td>Supporting community in substance use prevention</td>
<td>Substance abuse prevention program</td>
<td>Adolescents</td>
<td>Universal</td>
</tr>
<tr>
<td>Junior plus</td>
<td>Structured free time health promotion program using creative techniques</td>
<td>Children</td>
<td>Universal</td>
</tr>
<tr>
<td>Promoting healthy lifestyles in children and youth from foster families</td>
<td>Structured free time health promotion program</td>
<td>Children and adolescents in foster-care</td>
<td>Selective</td>
</tr>
<tr>
<td>Quality parenting course</td>
<td>Parent training program</td>
<td>Parents</td>
<td>Universal</td>
</tr>
<tr>
<td>Growing up together</td>
<td>Peer-violence prevention program</td>
<td>Children from 4th and 5th grade</td>
<td>Selective</td>
</tr>
<tr>
<td>My picture in the mirror</td>
<td>Health promotion program for self-confidence training</td>
<td>Elementary school children</td>
<td>Universal</td>
</tr>
<tr>
<td>I know who I am</td>
<td>Substance abuse prevention program</td>
<td>Adolescents</td>
<td>Universal</td>
</tr>
<tr>
<td>Quality parenting course</td>
<td>Parent training program</td>
<td>Parents</td>
<td>Universal</td>
</tr>
<tr>
<td>Early drinking of youth and its prevention</td>
<td>Prevention of alcohol consumption in youth</td>
<td>Adolescents</td>
<td>Selective</td>
</tr>
<tr>
<td>Helping peers—volunteers of healthy city</td>
<td>Positive development promotion program</td>
<td>Children and adolescents</td>
<td>Universal</td>
</tr>
<tr>
<td>Empowering children through dance—Dancing class</td>
<td>Program of health promotion aimed at life skill training</td>
<td>Children from 5th grade</td>
<td>Universal</td>
</tr>
<tr>
<td>Neighborhood circle</td>
<td>Structured free time health promotion program using art techniques</td>
<td>Children from 7 to 15 years old</td>
<td>Universal</td>
</tr>
<tr>
<td>Happy parent—happy children</td>
<td>Parent training program</td>
<td>Parents</td>
<td>Universal</td>
</tr>
<tr>
<td>Parenting with a smile</td>
<td>Parent training program</td>
<td>Parents of preschool children</td>
<td>Universal</td>
</tr>
</tbody>
</table>
Variables that are demonstrably related to the program (Molleman et al., 2005a,b), consists of 39 quality criteria – effect predictors, variables that are demonstrably related to the program’s intended output and distributed within eight clusters. Pref 2.0 items reflect research findings on effect predictors, as well as insights into such predictors derived from critical discussions with practitioners. The Contextual Conditions and Feasibility cluster contains 14 items which first describe the quality of support and commitment of internal and external partners toward the program. Secondly, in this cluster the resources and capacity of the program and its leadership (e.g. expertise of the project manager) are rated. The Problem Analysis cluster includes 13 items which evaluate the degree to which the nature, severity and scale of the problem that is targeted by the program is considered. The Determinants of Behaviour and Environment cluster consists of 13 items. Its items reflect the quality of the program’s theoretical model, if the contribution of determinants to the problem and the amenability of factors to change are described, and the quality of how determinants are prioritized and selected. The Target Group cluster includes 7 items about the degree to which characteristics of the target group, opportunities for the target group to change, and accessibility of the target group are taken into account by the program. The Objectives cluster includes 12 items that assess if a program’s objectives are logical and feasible given the problem being targeted. This includes if they are specific enough, specified in time, measurable, and acceptable to the main stakeholders. Items in this cluster also assess whether the objectives are considered achievable given the available resources, contextual conditions, and intended period of time for the program. The Intervention Development cluster is the most comprehensive and consists of 33 items which rate the rationale of the intervention strategy, the program’s previous experience conducting the intervention, and how the program fits the culture of the group it targets. The items also rate the duration, intensity and timing of the intervention, participation of the target group, and whether an effective intervention technique is used. It also evaluates the feasibility in existing practice and coherence of the included interventions/activities. The Implementation cluster has 14 items. It reflects the program’s capacity for high-quality implementation. This includes the program’s fit to its deliverers, the appropriateness of the supplier of the implementation for these intermediating deliverers, the use of implementation monitoring and feedback, and if the intervention is incorporated in an existing organizational structure. The Evaluation cluster consists of 16 items that describe the clarity and level of agreement regarding the principles of evaluation between different stakeholders. It also includes the quality of the actual process and effect evaluation. The same cluster also assesses the quality of the feedback on evaluation findings to the relevant stakeholders in a community.

Scoring. Each cluster has a different number of items that are scored on a scale from 1 to 3 (1—weak or non-assessable, 2—moderate and 3—strong). The score for each cluster is the sum of each item ratings divided by the maximum possible score for that cluster, and multiplied with 10. The Total Pref 2.0 rating for the whole project was calculated as the average score of all the individual clusters’ scores. Following that procedure, total project ratings on the Pref 2.0 instrument could range from 3 to 10. For an individual project, results can be shown by a separate score for each cluster and as a total Pref 2.0 score for the whole project. This enables comparisons between projects on both cluster level and the total score.

Reliability assessment and analysis
Regarding the fact that there were three assessors, the reliability of the Pref 2.0 had to be assessed by using generalizability theory and calculating the generalizability coefficient (G) and the standard error of measurement (SEM) (Shavelson and Webb, 1991). Cronbach’s alpha could not be used as a reliability estimate as both raters and items may contribute to the measurement error. While Cronbach’s alpha is only applicable in situations where there is just one source of measurement error, generalizability theory accommodates complex measurement designs with more sources of error. G and SEM were computed on different levels of aggregation: for each of the eight clusters and for Pref 2.0 total score. The conventional minimum reliability threshold for reliability coefficients like G is 0.70. There is no generally accepted maximum value for SEM, but the convention is that the accepted value of SEM is lower than 0.26. Molleman and his colleagues (Molleman et al., 2006) found following Pref 2.0 reliability indicators: for all clusters together: $G = 0.85$, $SEM = 0.49$ and for total project score: $G = 0.67$, $SEM = 0.86$.

RESULTS
Reliability of Pref 2.0
The measure of agreement between the 3 assessors found in this study for total project score is $G = 0.79$ and $SEM = 0.44$. Results for all clusters together are $G = 0.92$ and $SEM = 0.28$. Both G factors, for total project score and all clusters together are indicating sufficient reliability.
and are higher than the conventional minimum threshold. Standard errors of measurement are in both cases higher than a conventionally accepted value (SEM < 0.26) which is influenced by several sources of error and their interactions: 24 different projects, 24 differently written project proposals and 3 assessors with potentially different understandings of some Prefi items.

Program quality in Istria
The total Prefi (2.0) scores of the 24 assessed programs ranged from a minimum of 4.17 to a maximum 8.56 (SD = 1.10).

Since this is the first time the Prefi 2.0 was used in Croatia and quality norms have to be established for the instrument, the theoretical mean (M = 6.65) of the total score was used as a quality reference point. Only 4 of the 24 assessed projects score above this criterion value (i.e. projects 4, 5, 20 and 24). From Figure 1 it is also noticeable that calculation of the individual total Prefi scores of assessed projects enables us to make a comparison of quality level between all 24 projects.

The average total Prefi score across all 24 Istrian projects is 5.68. This overall quality level is almost one standard deviation (−0.88) below the chosen quality criterion of 6.65.

Figure 2 presents an average result for each Prefi cluster based on the individual cluster results of all 24 projects and is showing differences in quality level between the project’s elements. Only cluster 5 representing ‘Objectives’ (C5 = 7.32, SD = 1.29) shows an average higher than the quality theoretical mean (M = 6.65) while all seven other clusters score below the mean. The lowest score of all assessed projects was achieved on the cluster ‘Evaluation’ (C8 = 4.75, SD = 1.48). Other Prefi clusters which also show very low quality levels in this sample of projects are the clusters ‘Problem analysis’ (C2 = 4.81, SD = 1.49), ‘Determinants of problems, behavior or environment’ (C3 = 4.91, SD = 1.44) and ‘Implementation’ (C7 = 5.25, SD = 1.34). The remaining four clusters have mean scores less than one standard deviation below the quality criterion.

DISCUSSION
The first aim of this study was to examine the reliability of assessing program quality with the Prefi 2.0 instrument. The results indicate that the reliability of the assessments by 3 assessors is high and satisfactory (total score G = 0.79 and for all clusters G = 0.92), while the standard error of measurement is higher than expected (total score SEM = 0.44 and all clusters SEM = 0.28). Even though it was found that three assessors can provide a reliable assessment with the Prefi 2.0 instrument like in the original study (Molleman et al., 2006), we have to take those results with caution because of higher SEM than expected. For minimizing the standard error of measurement, it is necessary to ensure that assessors are having similar understanding of the criteria and scoring system before they are independently using the instrument. Furthermore, it was noticed that some items of the Prefi clusters were not phrased clearly enough (for example within the cluster ‘Implementation’) which made estimations on some quality aspects of the project more difficult. In addition, we also found that assessing other people’s programs can be difficult when necessary information is lacking or provided information is unclear. For this reason, the designers of the Prefi 2.0 recommend to combine written program descriptions with interviews with program designers and managers. Calculation of the final score on each Prefi 2.0 subcluster is time consuming.
which may lead to a lower quality of assessment. This could be avoided through developing a digital version of the instrument in which marked scores would be automatically computed and assigned to appropriate norm value—weak, moderate or strong. Digital version could contribute substantially to Preffi’s reliability because it could offer more specific explanations for each criterion, as well as suggestions that might lead to more objective assessments. These considerations need to be taken into account in future efforts to further improve the Preffi 2.0 and its application.

Other aims of this study were to describe the usage of Preffi 2.0 as a quality-targeted instrument for the mental health promotion and prevention field in Croatia, and through its application to describe the actual quality of a cohort of 24 interventions applying for government funding from the Region of Istria. As described in this study, this application has offered insight into each program’s quality level, differences in quality level between programs, and into the average quality level of all assessed programs. It also provided information about the higher or lower quality elements (Preffi clusters) of individual programs as well as for the whole group of programs. Results have shown that programs which have higher total Preffi scores in the group of all 24 projects also achieved significantly higher results on the clusters of Contextual conditions and feasibility (cluster 1), Problem analysis (cluster 2) and Intervention development (cluster 6). The average total score across all 24 projects which are representative for the Region of Istria can be considered as an overall quality indicator of the state of the art in the field of mental health promotion and prevention in this region. The managers and practitioners of these programs are the region’s most active stakeholders in the field of mental health, so this overall indicator can be considered as an indicator of the state of art. According to the Preffi 2.0 the overall quality score is 5.68, which is below the theoretical mean (\( M = 6.65 \)) of total Preffi scores. The distribution of average results across eight Preffi clusters shows which project developers’ skills regarding project development and implementation need further improvement in Istria. The seven clusters whose quality level is lower than the theoretical quality mean are presenting challenges and opportunities for further improvement of mental health promotion and prevention projects in Region of Istria. They form incentives for investing in further improving of knowledge and skills of program authors and deliverers in designing and implementing effective projects. According to the Figure 2, special attention is needed for the improvement of problem analysis, program evaluation and quality of program implementation. Although the 24 included projects are recognized in the Region of Istria as the relatively better programs in community, assessment with the Preffi has shown that all included programs need strategic investments in quality improvement.

Based on these study outcomes, the Preffi 2.0 has been found reliable and able to provide information about the
total quality level of an individual project, just as about the general quality level of all projects included in the study. Furthermore, Pref 2.0 can reliably assess the quality level of different aspects of an individual project, but can also describe an average quality level of different aspects of several assessed projects. Mentioned Pref 2.0 characteristics enable conclusions about quality differences between projects and between different project’s elements. This study suggests that Pref 2.0 could be considered as a quality assessment instrument.

Although examining the predictive validity of Pref instrument was not a part of a study presented in this paper, it is important to stress that the usage of Pref might also contribute to the quality assurance process in the future. For example:

1. The quality indicators contained in the Pref 2.0 could be incorporated into the list of criteria for evaluation of grant applications and selecting high-quality projects for funding. In that way, total Pref scores could be used as a guide in the decision making process.

2. Information about the quality level of the assessed projects may result in initiatives to increase their quality through investments into project’s managers and deliverers knowledge about the principles of effective programs.

3. The incorporation of quality indicators contained in the Pref 2.0 instrument into criteria for project’s financing could motivate applicants of the projects to develop and propose projects of higher quality.

It is worth to mention some additional advantages of the instrument in general. Pref 2.0 was designed in a way that it can be applied and useful for assessing projects of different kinds, not only projects from the field of mental health promotion and prevention. Its usability is wide range and it can contribute to the effectiveness of different fields and professions. As the Pref 2.0 also has a potential to be quality assurance instrument, it can be used at various stages of a project, either to critically evaluate one’s own project or to comment on projects proposed by others. Pref 2.0 instrument can be useful during the whole process: from planning and developing the project to its evaluation. Generally, Pref 2.0 can be a valuable instrument for guiding the quality management process. It offers an agenda for the important effectiveness issues that define the Pref 2.0 also as a valuable instrument to inspire policy-making. A systematic evaluation of projects makes it possible to formulate strategies of quality improvement on a local or national level. Sustainable application and further research on this instrument could be helpful in disseminating new scientific knowledge into a practice and in bridging the gap between science and practice.

Regarding the experience of using the Pref 2.0 instrument in this study, it is important to mention its limitations and need for further development. Some Pref 2.0 clusters and subclusters achieved a lower reliability level which is certainly limiting the statistical power of study conclusions. It is very much possible that lower reliability was caused by the small sample of assessed programs (N = 24). It is also possible that lower reliability levels could be avoided by training the assessors on using the Pref 2.0. It is important to stress that assessment of projects’ proposals with Pref 2.0 was based on the application form designed by the Department of Health and Social Care, the County of Istra. Although this application form is comprehensive, it doesn’t involve all areas which are incorporated in the Pref 2.0. Because of that reason, some areas were difficult to assess from written materials and it would be better if individual interviews with each program’s managers and deliverers were conducted as an addition to the written project proposal assessment. The intention of the Pref 2.0 authors was to develop an assessment tool which will be easy to use and practical for practitioners. In this Croatian study, assessors which are prevention experts have noticed that its use by practitioners would require some prior skills and knowledge about mental health promotion and prevention terminology, theory and practice. Using the instrument as a self-assessment tool by project developers in Croatia would require a prior investment in their knowledge and understanding of the mental health promotion and prevention field. Future studies on Pref should be focused also on its content validity. Quality management instruments are dynamic entities, requiring continuous adjustment to the rapidly developing knowledge about effective mental health promotion and prevention programs and their successful implementation. Regular updates of the instrument are required to incorporate the most recent research findings and experiences by practitioners.

It is important to stress that for making valid conclusions about the level of quality of assessed mental health promotion and prevention programs, quality norms are needed. A comprehensive Pref predictive validity study intended to explore if Pref scores are predictive for successful outcomes of mental health promotion and prevention interventions could give a valuable contribution to the process of defining quality norms.

A crucial part of the wider research project, within which the study presented in this paper was conducted, included a study on Pref predictive validity. Besides assessing its predictive validity, study also involved development and assessment of effectiveness of the intervention ‘Training for prevention’. The basic assumption of this 32 h interactive
training is that the transfer of knowledge about effect predictors to project’s authors and intervention providers will result in improvement of project’s quality level and project’s outcomes in general. Results of the wider study could significantly contribute to an increase of the knowledge on Preff 2.0 usability and validity, and will be reported in future papers.

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