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The "Me and others" prevention program: impact evaluation and predictors for safer future behaviors
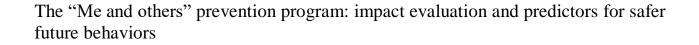

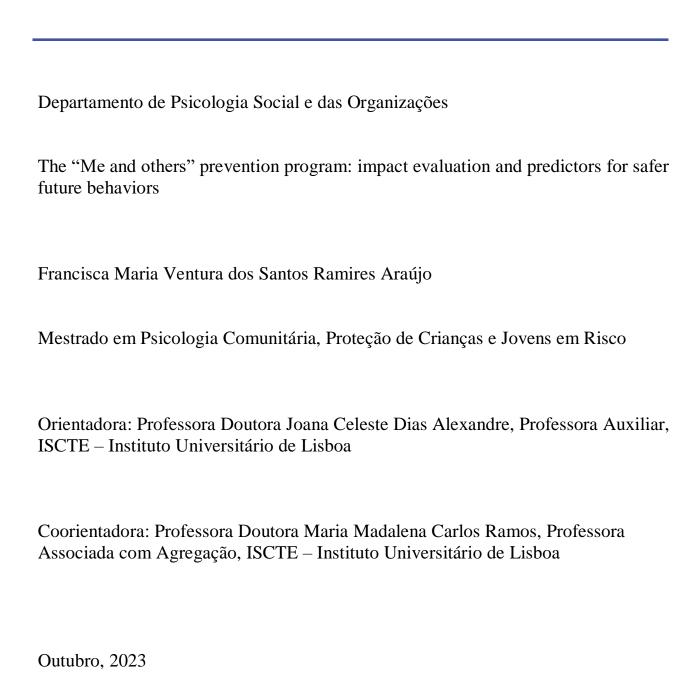Francisca Maria Ventura dos Santos Ramires Araújo

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Outubro, 2023

Departamento de Psicologia Social e das Organizações

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Resumo

As dependências sem substância são uma perturbação cada vez mais comum na população jovem, com importantes impactos negativos, onde os dados estatísticos apresentam resultados bastante alarmantes. A prevenção é, por isso, fundamental. O presente trabalho tem como objetivos 1) avaliar em que medida a narrativa 9 do programa de prevenção ''Eu e os Outros'' do Serviço de Intervenção nos Comportamentos Aditivos e nas Dependências (SICAD) promove mais crenças relativas a comportamentos seguros no grupo de intervenção (GI) (vs. grupo de comparação/GC), e 2) que crenças permitem predizer comportamentos futuros mais seguros. Seguindo um desenho pré e pós-teste (T1 e T2), com GI e GC, participaram neste estudo jovens com idades compreendias entre os 11 e os 20 anos. Os resultados obtidos não vão ao encontro do objetivo 1, ou seja, não existe um aumento significativo de crenças sobre comportamentos seguros no grupo de intervenção, comparando com o grupo de comparação. Verificou-se também (objetivo 2) que são as atitudes dos jovens que predizem os seus futuros comportamentos seguros e não a norma subjetiva, considerando o modelo da Teoria do Comportamento Planeado. Estes resultados vêm, por um lado, reforçar a importância da avaliação e monitorização de programas de prevenção e, por outro, dar pistas sobre que variáveis podem ser consideradas nestes programas, por forma a promover comportamentos mais seguros que procurem prevenir a dependência sem substâncias.

Palavras-chave: Dependências Sem Substância; Jovens; Uso Problemático da Internet; Prevenção

Códigos de Classificação (American Psicological Association):

3233 Abuso de substâncias e Adição

3560 Dinâmicas de Sala de Aula e Ajustamento dos Alunos e Atitudes

Abstract

Non-substance addictions are an increasingly common disorder among young people, with significant negative impacts and where the statistics show very alarming results. Prevention is therefore essential. This study aims to 1) assess the extent to which narrative 4 of the "Me and Others" prevention programme run by the Addictive Behaviours and Dependencies Intervention Service (SICAD) promotes more beliefs about safe behaviour in the intervention group (IG) (vs. the comparison group/GC), and 2) which beliefs predict safer future behaviour. Following a pre- and post-test design (T1 and T2), with IG and CG, young people aged between 11 and 20 years took part in this study. The results obtained did not meet objective 1, i.e., there was no significant increase in beliefs about safe behaviour in the intervention group compared to the comparison group. It was also found (objective 2) that it is young people's attitudes that predict their future safe behaviour and not the subjective norm, considering the Theory of Planned Behaviour model. These results, on the one hand, reinforce the importance of evaluating and monitoring prevention programmes and, on the other, provide clues as to which variables can be considered in these programmes to promote safer behaviours that seek to prevent substance dependence.

Keywords: Non-Substance Addictions; Young People; Problematic Internet Use; Prevention

Classification Codes (American Psychological Association):

3233 Substance Abuse & Addiction

3560 Classroom Dynamics & Student Adjustment & Attitudes

Índice

Index of tables

Introduction

Regarding the generalised use of the internet, the Addictive Behaviours and Dependencies Intervention Service [SICAD] (2021) points to Generation Z (individuals born in 2000) as those who started using the internet on a recurring basis at an earlier age. The literatures states that 58% of these individuals started using the internet between the ages of 10 and 14, and 10% even before the age of 10. Problematic Internet Use is more common among young people aged 15 to 24, with 5 out of every 100 Portuguese having a slight dependency on the Internet (data collected based on the "Internet Addiction Test") (SICAD, 2021). According to the same report, it is also important to emphasise that 18-year-olds tend to spend 4 or more hours a day using the internet.

Addressing the issue of gambling is becoming increasingly relevant. Advertising for this type of activity contributes to it as it normalizes the behaviour, especially in young people and helps to build a positive attitude towards it, contributing to the initiation of its use (Thomas et al., 2023). About the Portuguese population in general, 1 in 2 Portuguese gamble for money, and this gambling varies in format, i.e., social games, casino, sports betting, betting on horse races and even informal betting (SICAD, 2021). In the specific case of Portuguese young people, 2 out of 10 18-year-olds gamble for money, especially online, as do 5% of 13-year-olds and 15% of 17-year-olds (SICAD, 2021). At European level, in 2022, 96% of young Europeans between the ages of 16 and 29 say they use the internet daily, of which 84% say they do so to use social networks (EUROSTAT, 2023).

The same report mentioned above states that, as far as gaming is concerned, 1 in 10 young people spend 4 hours or more gaming on school days, and the figure rises to 3 in 10 young people at weekends (SICAD, 2021). It is also worth mentioning that these young people report that it is "difficult/very difficult" to stop gambling (SICAD,2021), which may demonstrate some level of dependency. This dependence has numerous consequences for the individual's life, namely difficulties in decision-making and a decrease in academic performance, in the case of adolescent students (Pontes & Griffiths, 2016).

Currently, and based on the DMS-5 (APA, 2014), gambling disorder is the only disorder considered as a non-substance addiction, which is closely related to problematic

internet use, since nowadays gambling is also carried out online (American Psychiatric Association [APA], 2014). The same document, despite considering internet gaming disorder as a disorder, considers it necessary to carry out future studies. This is a disorder that includes all online games apart from/excluding gambling.

Having said this, and after presenting a brief introduction on the topic, the present study aims to evaluate the narrative on non-substance addictions and problematic use of the Internet in the "Me and the Others" programme, with a special focus on analysing whether participants from the intervention group will change their beliefs about safe behaviour on the Internet, when compared to a comparison group of participants. This study also aims to explore the predictors of future safer behaviours, based on the Theory of Planned Behaviour (Ajzen, 1991). The importance of evaluating prevention programmes pertains to its efficacy, as this moment allows possible flaws in the programme to be identified, which consequently allows improvements to be suggested, while at the same time helping to highlight the programme's most successful aspects (K'CIDADE, 2007).

This work is organised into four chapters. The first chapter aims to review the literature about adolescence, the characterisation of Gambling Disorder and Internet Gaming Disorder, and a review of universal prevention programmes, as well as a description of the "Me and Others" programme. The second chapter describes the study method, more specifically the sample, data collection procedure and instruments used. The third chapter presents a description of the results obtained. The fourth and final chapter presents a discussion of the entire study, including limitations of the study and future recommendations.

Chapter I

Literature Review

1.1 Adolescence

Adolescence is the transition period between childhood and adulthood, and therefore entails tasks such as developing self-awareness as an autonomous individual, as well as transitions in social status and expectations (Salmela-Aro, 2011).

It is also at this stage that various biological, social, and behavioural changes take place. Adolescents change their role in the family and in society, reorganising their childhood characteristics and adapting them to their new roles. The need to belong is also characteristic of this stage of the individual, and peers who do not correspond to the adolescent's changing tastes are now rejected or perceived as threats (Batra, 2013).

Adolescence is also the period in which young people develop their identity, influenced not only by their family and peer relationships, but also by society (Batra, 2013).

The adoption of risky behaviours is also a characteristic of this stage, serving several functions, namely as a way to achieve goals related to group identity and adult status. The adoption of these behaviours is influenced by all the systems in which the adolescent is involved (microsystem – parental figures, peers, teachers; exosystem – community; and macrosystem – culture). Thus, many of the behaviours in general arise as a strategy to regulate emotions and the effects of relationships with peers and parental figures (Leather, 2009).

Peers are seen as a source of support for the transition process of independence from the family, fostering social skills. However, the opposite can also happen and in some cases, relationships whit peers can trigger antisocial behaviour (Spear, 2000).

1.1.1 Risk behaviours in adolescence

Risk behaviours are defined as reckless behaviours that will result in something negative for the individual who adopts them, however, and since risk is a cumulative concept, exposure to protective factors can counteract this effect (Rutter, 1987 as cited in Small & Luster, 1994). In the case of adolescents, risk behaviours include delinquency, aggression, risky sexual behaviour, substance abuse, among others (Peeters et al., 2019). The adoption of these behaviours is related to the individual's balance between short-term goals and long-term consequences, as well as to their perception of the risk of a given behaviour (Leather, 2009).

According to Steinberg (2007), it is possible to state that the adoption of risky behaviours is typical in the life of an adolescent because they have not yet fully developed the psychosocial competences that help them to make decisions and moderate their perception of risk.

Relationships with peers are strongly related to the adoption of risk behaviours, since they are easily influenced by their peers, who share the same propensity for risk behaviours, typical of the stage of life in which they find themselves (Gardner & Steinberg, 2005).

Relationships with the parental figures are also another factor to be considered regarding the adoption of these behaviours (Leather, 2009). The parenting style exercised by parents has an influence on the child's social and academic skills as well as their psychological development. Thus, positive parenting will provide the child with coping mechanisms to deal with frustration and stress that do not involve the adoption of risky behaviours (Michael & Ben-Zur, 2007 as cited in Leather, 2009).

According to Caridade and Braga (2020), risk and protective factors act as determinants of the likelihood of a particular problem occurring, i.e., the presence of a protective factor reduces the likelihood of the problem occurring, while the opposite applies to risk factors. Protective factors can also act as suppressors of risk factors, rather

than just reducing the likelihood of a particular problem occurring (Farrington et al., 2016).

1.2 Risk and protective factors of risk behaviours

The presence of risk and protective factors occurs at different levels: personal, interpersonal, and contextual (Zappe et al., 2018). Thus, on a personal level, the authors identify personality traits such as impulsiveness and sensation-seeking as risk factors for adopting risky behaviours. In relation to individual protective factors, they considered, for example, the existence of expectations on the part of the young person regarding their future (Zappe et al. 2018).

At an interpersonal level, some of the risk factors pointed out relate to the norms adopted by peers regarding the acceptance/support of risky behaviour; risk factors associated with the family are also considered, namely the adoption of risky behaviour by parental figures, conflicting relationships between the young person and parental figures and permissiveness. However, it is possible to consider both family and peers as protective factors: peers function as protective factors if they promote feelings of well-being and comfort; family aspects considered protective include intimacy, closeness, positive relationships between parental figures and the young person, and perceived parental support (Zappe et al. 2018).

Finally, at a contextual level, well-being, and satisfaction at school, as well as the teacher-student relationship, can be considered protective factors. Contextual risk factors include, for example, unfavourable socioeconomic and housing conditions (Zappe et al. 2018).

Recently, Bozzini et al. (2021) suggests another approach, a distinction between indirect and direct risk factors, as well as indirect and direct protective factors. The main indirect factors are related to social determinants of health and that therefore affect development, health, and well-being. These include certain prenatal conditions,

birth characteristics like low weight, and adverse experiences in the first years of life. As for direct risk factors, these constitute the broader social trends conditioning those described previously above. As such, they are defined in the context of issues related to the organisation of society (health of the national population, unequal salaries, gender, ethnicity, etc.) and other factors that aggravate social stratification (access to education, housing, food, quality relationships with peers, etc.)

On the other hand, indirect protective factors are divided into three categories: individual (personality traits, such as resilience); social (positive affective relationships); and healthy behaviours. Direct protective factors are also divided into three categories: dispositional attributes of the individual (e.g., self-efficacy), family attributes (e.g., parental support); and extrafamilial setting (e.g., community integration) (Bozzini et al., 2021).

Taking the above overview of the conditions involved in the adoption of risk behaviour in youth into account, will now discuss the most prominent online risk behaviours these being keeping in touch with strangers, sexting, online gambling, and Internet Gaming Disorder.

1.3 Risk behaviours on the Internet

The use of various sources of information and communication via the Internet is something that characterises adolescents' behaviour, particularly due to their emotional and communication needs (Gámez-Guadix et al., 2016). For the most part, young people use social networks to maintain relationships with other individuals, which often involves them sharing photographs and personal information (Dowdell, 2011). Currently, 80% of European teenagers between the ages of 9 and 16 use social networks and the internet daily (Ortega-Barón et al., 2021). Associated with this daily and frequent use are various risks, such as cyberbullying, sexting and grooming, with 14,8% of teenagers reporting sexting behaviour and 11,5% reporting having been sexually lured via the internet (Ortega-Barón et al., 2021).

In the case of the Portuguese population, a report published by APAV in partnership with Geração Cordão (Patrão et al., 2023), conducted with a sampled of 344 young people (3rd cycle, secondary school, bachelor's, master's, and doctoral students), revealed that 41,3% had experienced at least one online situation that made them feel uncomfortable, within a period of one year. Regarding experiences of cyberbullying, 36,9% of young people said they had been treated in a derogatory way online, namely negative comments (42,3%), sharing images ridiculing the young person (38,7%) and spreading rumours (37,4%). The report also states that 48,6% of young people claim to have received messages of a sexual nature, including images and videos, and that 28,1% of young people have sent this type of message. Contact with strangers is also a very representative behaviour in this sample, with 82,8% of young people claiming to adopt this behaviour.

It's also worth mentioning that this report presents young people's responses in relation to functional changes they experience as a result of using the internet. The predominant responses are: more time spent online in times of emotional distress due, for example, to arguments or problems with friends (59,8%); less time to study due to internet use (57,3%); and less time to sleep due to internet use (54,9%) (Patrão et al., 2023).

Dowdell (2011) states that most of secondary school students who maintain some kind of online relationship with another person they do not know personally are more likely to arrange a meeting with them in the future. She also points out that the age group at risk of adopting this type of behaviour is between 15 and 17 years old, as they no longer have parental supervision when using the internet.

The same author points out that young people who have online relationships with strangers are more likely to engage in other risky online behaviours, particularly girls, such as sharing personal information online and sending intimate photographs (Dowdell, 2011).

Another risky online behaviour that has become increasingly common among the younger population is online gambling. The huge availability of online gambling games and the fact that they are legal, as well as advertising for them, has made this a growing problem among teenagers (Calado et al., 2016).

Factors that have contributed to the increase in this problem are, in addition to those already listed, easy accessibility, affordability and anonymity, since online betting sites cannot guarantee reliable age verification (Calado et al., 2016).

Finally, it's important to mention another risky behaviour when using the internet: addiction, namely Internet Gaming Disorder. This disorder is closely related to some consequences such as insomnia, difficulty concentrating, depression, stress, anxiety, as well as impulsive and aggressive behaviour and suicide attempts (Chau et al., 2019).

Internet Gaming Disorder is characterised by excessive online gaming and neglect of interpersonal relationships, which explains the isolation and conflicts in these individuals' lives (Chau et al., 2019).

1.4 Gambling Disorder and Internet Gaming Disorder

1.4.1 Gambling Disorder

Gambling disorder is considered a non-substance-related disorder (APA, 2014). Diagnosis implies pathological, recurrent and persistent gambling behaviour combined with the presentation of four or more of the fallowing factors over a 12-month period: need to gamble an increasing amount of money; irritation at attempts to reduce or stop gambling behaviour; unsuccessful efforts to reduce or stop gambling; excessive preoccupation with gambling (e.g. thinking of ways to get money to gamble again); gambling as an attempt to reduce feelings of distress; after losing money, gambling again the next day to get "revenge" for the loss; lies about the state of addiction to

gambling; damages or loses relationships, job, career, etc.; needs financial support from others to resolve situations caused by addiction (APA, 2014).

An individual with this disorder increased the likelihood of losing something of value in the expectation of obtaining something of greater value and therefore disrupts their personal, familiar, and professional life. Family relationships are often the source of financial help in the occasions when all the money has already been spent on gambling since, there is an immediate need to gamble at times of loss to cancel them out (APA, 2014).

There are also other symptoms that are a key factor in the diagnosis of gambling disorder, such as: distortions in thinking, impulsivity, competitiveness, restlessness, and excessive need for approval. In other cases, people with a gambling disorder tend to show symptoms of depression and loneliness, with moments of gambling appearing at times of despair, guilt, or depression (APA, 2014).

1.4.2 Internet Gaming Disorder

Internet Gaming Disorder is listed in the DMS-5, although it is a disorder that is still being studied and may belong to the category of a non-substance-related disorder (APA, 2014).

Thus, this disorder involves persistent and recurrent use of the internet to participate in games, mostly in groups, and its diagnosis involves five or more of the following factors over a 12-month period: excessive preoccupation with internet gaming; when there is no possibility of gaming, the individual shows withdrawal symptoms; increased time spent gaming; unsuccessful attempts to control gaming moments; lack of interest in possible other hobbies; despite knowledge of the psychosocial consequences of gaming, the individual continues to game excessively; omits to talk about their involvement in internet gaming; online gaming acts as an escape from negative feelings; loss of interpersonal, professional and/or educational relationships. It should also be noted

that this disorder does not include activities/games for money on the internet (APA, 2014).

There are behavioural similarities between this disorder and others related to substance use, which explains the moments of abstinence, the gaining of tolerance that leads to an increase in the time spent playing online, the failed attempts not to play and the impairment of the individual's normal functioning (APA, 2014).

Considering these disorders and the associated implications, it is necessary to find responses that are mainly preventative, but also remedial when the problem is already established.

1.5 Prevention Programmes

There are three levels of prevention: universal/primary prevention, which encompasses the general population, without taking into account risk factors or individual needs, and which aims to prevent a certain behaviour; indicated/secondary prevention, which focuses on a more restricted and vulnerable group of the general population where it is possible to identify certain characteristics that are identified as a risk; and finally, selective/tertiary prevention, where the target group will be individuals who clearly adopt certain risk behaviours (Caplan, & Grunebaum,1967).

It is possible to compare this perspective with that of Gordon (1983), who differentiates the level of intervention not based on the prevention measure to be applied but based on the target group of the intervention. Thus, universal prevention refers to all prevention that can be aimed at the general population, without any selection criteria. Selective prevention only targets groups at risk of a particular problem. And finally, targeted prevention is directed only at individuals who already show some risk factor in relation to the problem to be prevented (Gordon, 1983).

Since the "Me and Others" programme is a universal prevention programme applied in a school context, the effectiveness of similar programmes will be discussed. Through the systematic review of Monreal-Bartolomé et al. (2023), it is possible to verify

which universal prevention programmes are most effective in terms of reducing the frequency and severity of gambling, and how they are implemented. Only these will be mentioned below.

One such programme is the "Ludens" programme (Chóliz, 2017 as cited in Chóliz, et al., 2021) a universal prevention programme applied in two sessions by a psychologist specialising in addictions and pathological gambling. Its main objectives are: to inform young people; to make them aware of the strategies used to promote gambling as a socially accepted behaviour; to change young people's attitudes towards gambling; and to prevent risk behaviours. The programme involved 2,372 adolescents aged between 14 and 19, 48,8% of whom were female and 51,2% male. The application of this programme is based on the use of audiovisual resources, namely videos of testimonies from individuals with gambling problems, which shed light on the process that leads to the development of addiction and the diagnostic criteria in the DSM-5 (Chóliz et al., 2021).

Another programme that showed the similar results in terms of effectiveness was the "Stacked Deck" programme (Williams et al., 2010). This is a programme that aims to work on the "history" of gambling, i.e., the real odds of winning and the fallacies of betting, as well as risk factors and causes of gambling problems, in addition to working on skills such as decision-making and problem-solving. The programme involved 949 participants aged between 14 and 20, 47% female and 53% male. The programme takes place over five lessons, with an optional sixth lesson which takes place one month after lesson five and aims to consolidate all the content taught previously. There is a theme for each of the lessons: lesson one - the "history" of gambling, types of bets and odds; lesson two - addiction associated with gambling (symptoms, causes, risk factors); lesson three - exercises are carried out so that young people become aware of the errors in thinking that contribute to addiction to gambling; lesson four - decision-making and problem-solving; lesson five - working on the reasons that lead to bad decisions, focusing, for example, on peer pressure; lesson six - application of a quiz on the previous lessons (Williams et al., 2010).

We should also consider the "Vernetzte www.Welten" programme (Walther et al., 2012), a programme aimed at 6th and 7th graders, consisting of four 90-minute sessions. This programme covers topics such as Internet use, online communication, computer games and gambling and its main objectives are to reflect on and monitor excessive consumption of online content, as well as to raise awareness of addictive online behaviour. The programme's implementers are teachers who must undergo a four-hour training course. It is worth mentioning that the programme was applied to 2109 participants, with an average age of 12, 49,6% female and 50,4% male (Walther et al., 2012).

Finally, the programme evaluated by Canale et al. (2015), which is a web-based universal prevention programme that follows the cognitive-behavioural model, as well as the behavioural interview approach. It was applied to 223 participants aged between 14 and 18, 42% female and 58% male. The programme aims to assess the participants' gambling behaviours, as well as their attitudes towards the profitability of gambling, and is made up of 5 sessions, which are divided into themes: the first session aims to gather socio-demographic information about the participants, as well as their behaviours and attitudes towards gambling, and personal feedback is given to the participants at the end of this session; the following three sessions are online training moments which consist of completing online activities, in a game and question-answer format (game 1 - "What is gambling? "; game 2 - "Stop the chance"; game 3 - "Question and answer on gambling"; quiz 1 - "Test your knowledge"; quiz 2 - "What are the odds?") (Canale et al., 2015).

In addition to the programs mentioned in the systematic review of Monreal-Bartolomé et al. (2023) it is important to consider another Portuguese program evaluated by (Calado et al., 2019). The prevention program to be presented is a universal gambling prevention program for young people in secondary school, and its theoretical framework is Cognitive-Behavioural Theory, as well as an approach to sensation-seeking. The main objectives of the program are to increase correct knowledge about gambling and reduce misconceptions about the subject, reduce gambling behaviour and change the factors

associated with young people's risk behaviours. The program was attended by 111 secondary school students, 65 female and 46 male. It consisted of five sessions, each corresponding to one of the following themes: "Gaming or Gambling"; cognitive distortions and misconceptions related to gambling; attitudes towards gambling and money; sensation seeking; and problem gambling. Various methods were used during the sessions: quizzes to recap on the previous session; discussions on everyday situations that allowed the new skills acquired to be practiced; encouragement of critical thinking; and teamwork.

1.6 SICAD and the ''Me and the Others'' programme

The Intervention Service for Addictive Behaviours and Dependencies (SICAD) has as its main objective the reduction of the consumption of psychoactive substance and the reduction of dependencies, while promoting the prevention of addictive behaviour (SICAD, 2023).

It was created in 2012, following the approval of Decree-Law no. 124/2011, which abolished the Institute for Drugs Addiction, I. P.. It is responsible for planning and monitoring programmes to reduce consumption of psychoactive substances, prevent addictive behaviour and reduce dependency. It also develops technical instruments and guidelines for local interventions services (SICAD, 2023).

The ''Me and the Others'' programme was created in 2006 by a technical team from the now defunct Institute for Drugs Addiction. The programme consists of ten interactive narratives, and throughout the course of the story the participants will make decisions that influence its progression (SICAD, 2023) (Table 1.1). As a theoretical framework, the programme follows the Theory of Planned Behaviour (Ajzen, 1991), a theory that supports the idea that an individual's behavioural intention is determined by attitude, subjective norm, and perceived control of behaviour. Attitude is determined by behavioural beliefs, subjective norm is determined by normative beliefs and finally, perceived control of behaviour is determined by control beliefs (Ajzen,1991). This theory

is often used in substance abuse prevention programmes, making it possible to explain the variance of the behaviour under study, as well as the intention to carry it out, as well as explaining, as in this study, which constructs of the theory best predict behaviour (Jeihooni et al., 2021).

Table 1.1

Narratives from the program "Me and the Others

Narratives	Themes
Narrative 1	Psychoactive Substances and Processes in Adolescence
Narrative 2	Cannabis and Relationships with Peers
Narrative 3	Tobacco, Bullying and School Dynamics
Narrative 4	Addictions without Substance
Narrative 5	Sexuality in Adolescence and the Role of Psychoactive Substances
Narrative 6	The Law and Drugs
Narrative 7	Addictive Behaviours in Recreational Contexts
Narrative 8	The Problems Linked to Alcohol
Narrative 9	The Future: Personal Development, Self-Discovery, and Addictive Behaviours
Narrative 10	COVID-19

The narrative to be evaluated in this work, is about non-substance addictions and problematic internet use, and is made up of 99 scenes, divided into 5 blocks, and is presented to young people as a virtual and interactive game, ideally projected on the board of the classroom where the implementation takes place. Simultaneously, through a game code, students can access the numerous decisions that arise through the narrative on their mobile phones, so that they can choose the one they agree with.

The entire application process is coordinated by the ''Game Master'', a teacher or other person responsible for the group of young people to whom the narrative is applied, who must undergo a 24-hour, face-to-face training process. This training consists of five sessions, four 4-hour sessions and one 8-hour session, the latter being longer so that it is possible for all trainees to undergo application training. The remaining sessions cover the theory behind the programme, the narratives and their characters, the application methodology, evaluation, and planning.

During the formative moments, as well as during the narrative, various activities are suggested that the game master can organise with the students, such as moments of research on certain websites, mini-games, group dynamics, among other activities.

The narrative we are analysing deals with various themes, some of which arise directly, while others may emerge from moments of discussion encouraged by the game master, depending on the degree of relevance he considers, always based on the group he is working with. The main themes are family dynamics; non-substance addictions; psychoactive substances; the treatment network; social networks and influencers; cybersecurity; dropping out of school; alternative training programmes to mainstream education; trust; secrecy; and informal help through peers (SICAD & Safe Internet Centre - Awareness Centre [CIS], 2002).

Having explained the narrative and how it is presented, it makes sense to clarify how the Theory of Planned Behaviour (Ajzen, 1991) is applied to the context of the application. Thus, the young people's decision-making throughout the narrative will

15

depend on the attitude attributed to each of the situations, the acceptance of peers (subjective norm) of the decisions that are being made individually, and on the ability of these decisions to be defended in moments of confrontation with peers (perception of behavioural control) (SICAD, 2023). The fact that the entire narrative involves young people putting themselves in the role of the character will allow them to consider the importance of values and the impact they have on the different situations in the character's life (SICAD, 2023).

Considering the systematic review (Monreal-Bartolomé et al., 2023) presented above, and not just the programmes listed, it is possible to make some associations between what the authors considered to be effectiveness factors and the narrative in all the "Me and Others" programme.

Firstly, the authors mention the application of programmes by teachers as an advantage, particularly in terms of feasibility and cost-effectiveness (Monreal-Bartolomé et al., 2023). Programmes that use digital sources and are applied in an online format are also considered very promising in terms of results (Monreal-Bartolomé et al., 2023), particularly those that are interactive, as they allow for greater involvement on the part of young people (Calado et al., 2019). Finally, another important factor in terms of promoting the effectiveness of programmes is the training of those who implement them (Calado et al., 2019)

Having said that and moving on to analyse the method of application of the "Me and the Others" programme, it can be seen that all the criteria mentioned above are present, i.e., the programme is based on the use of interactive narratives, accompanied by other optional tasks involving the active use of multimedia resources. As far as the training of the trainers is concerned, this is also a criterion met by the "Me and Others" programme, and it is important to consider that the programme's trainers are generally teachers.

1.7 The importance of programme evaluation

Evaluating a programme is a process of analysing the results obtained, which depends on regular monitoring throughout its duration. This evaluation must involve all those partaking in the programme, providing an overall view of the programme and must consider all its stages of the programme (activities, duration, etc.) (K'CIDADE, 2007).

The main objective of the evaluation process is to identify the information and data that make it possible to characterise a programme in terms of its value, while also making it possible to assign different values to its various components and activities. It is through evaluation that it will be possible to define whether or not a programme can serve as a basis for contributions to others (Aguilar & Ander-Egg, 1994 as cited in Cotta, 1998).

This process also makes it possible to identify expected results that have not been achieved, as well as to highlight a programme's weak points, allowing them to be worked on in the future (K'CIDADE, 2007). Furthermore, one of the most important factors regarding this procedure is that it allows the impact of the programme to be analysed and its quality to be assessed, so that the reliability of the results can be defined (Dusenbury & Falco 1995).

There are various types of evaluation, which differ in terms of when they are carried out and by whom. Thus, the diagnostic/preliminary evaluation takes place before the intervention and makes it possible to analyse the relevance and feasibility of carrying out a particular programme, as well as comparing the pre- and post-intervention results (K'CIDADE, 2007).

Ongoing evaluation assesses whether the effects obtained during the programme are as intended, making it possible to change the procedure used while the programme is ongoing (K'CIDADE, 2007). Since this type of evaluation makes it possible to carry out a continuous evaluation of the program, it will be relevant for decision-making processes regarding its executability (Cotta, 1998).

Finally, the final or ex-post evaluation takes place at the end of the programme and allows for an objective assessment of all the objectives achieved, their impact and the possibility of implementing it again in the future (K'CIDADE, 2007).

As for the authors of the evaluation, it can be external, internal or self-evaluation. External evaluation is carried out by actors who were not involved in the content/activities being evaluated, i.e. it is intended to be impartial. On the other hand, internal evaluation is carried out by individuals belonging to the institution responsible for the programme. Self-evaluation consists of an assessment of the programme and its activities by those directly involved in the programme, as well as its recipients (K'CIDADE, 2007).

Objectives and Hypotheses

The current study aims to: 1) evaluate the impact of the narrative on non-substance addiction and internet problematic use (narrative 4) of the programme "Me and the Others"., and 2) to assess which beliefs act as predictors of future safe behaviours on the internet, for young people that participated in the intervention group.

Thus, two hypotheses were formulated: Hypothesis 1- It is expected that young people in the intervention group will show an increase in beliefs about safe behaviour from T1 to T2, when compared to the comparison group, and it is also expected that there will be an increase in risk perception from T1 to T2 in the intervention group, due to increased awareness of the issue.; Hypothesis 2 - according to the Theory of Planned Behaviour (Ajzen, 1991) it is expected that attitudes and subjective norm will be predictors of future behaviours.

<center>**Chapter II**</center>

Method

2.1 Study design

A quasi-experimental study was carried out, with an intervention group and a comparison group.

2.2 Participants

A total of 466 individuals took part in this study, 81 of whom formed the comparison group and the remaining 385 the intervention group. The ages of the participants in the overall comparison group sample ranged from 13 to 16 years old ($M = 14,22$; $SD = 0,742$) and most of them were female (48,1%). In terms of nationality, the majority were Portuguese (91,4%), spread across the districts of Guarda, Lisbon and Setúbal. As far as year of schooling is concerned, the participants in the comparison group attended 8th grade (27,2%) and 9th grade (72,8%), with only 6 participants having failed some year of schooling.

Analysing the overall intervention group sample, the participants' ages ranged from 11 to 20 ($M = 14,76$; $SD = 1,794$), 50,6% were male and 44,7% female, the remaining 4,7% chose the answer "I'd rather not say". Most of the participants in this group were Portuguese (84,7%), with 80,3% from the Lisbon district. Finally, regarding the year of schooling, they are distributed between the 3rd cycle and secondary school, with 91 of the participants having failed at least one year of schooling.

For the purposes of analysing the data, to test the first hypothesis, only participants with paired answers between pretest and post-test were considered, i.e., participants who answered these two questionnaires with the same identification code. Thus, a sample of 57 participants was considered. Of these, only 51 filled in all the sociodemographic information: 45,1% were male and 51% female, with the remaining 3,9% answering, "prefer not to say". Their ages ranged from 12 to 19 ($M = 14,8$; $SD =$

1,74), and 84% of the participants were Portuguese. Finally, in terms of schooling, the participants had between 7th and 11th grade education, and 70,6% said they had never failed a year.

In order to test hypothesis 2, only 192 participants from the intervention group were considered, with the inclusion criterion being that they had filled in all the information in the pre-test and post-test. In this sample, 47,9% of the participants are male and 46,3% female, the remaining 5,8% answered "I prefer not to say". The ages of this group ranged from 11 to 20 ($M = 15,33$; $SD = 3,979$), and 86,8% of the participants were Portuguese. Regarding their district of residence, 94,9% lived in the Lisbon district, 4,4% in the Viseu district and 0,7% in the Braga district. Lastly, 26,8% of the participants in this group had already failed between the 1st cycle and the 12th cycle of secondary school.

2.3 Instruments

The instrument used was a questionnaire divided into two parts, being the first part the socio-demographic characterization of the participant (e.g., ''age''), as well as an Internet user (e.g., '' What are the activities you most often do on the internet?''); the second part assessed the participants' perception of their own knowledge and behaviour when using the Internet, using existing scales and developing new ones.

With regard to the scales developed, they included questions about the likelihood of behaviour and cybersecurity, as well as questions regarding beliefs about safe behaviour on the internet, both for themselves and for their peers (e.g., "using social media is"; "my friends say using social media is"), as well as questions regarding beliefs about behaviour on the internet (e.g., "I know how to control my time on social media"). Risk perception questions were also created based on the Theory of Planned Behaviour (Ajzen, 1991)

The questions about behaviour probability intended to assess the chances of the participants developing the described behaviour in the future (e.g., ''Accepting or arranging meetings with people you only know online''). Answers were given on a 5-point Likert scale, ranging from 1 ("highly unlikely") to 5 ("very likely"). On the following subject of cybersecurity, the eleven questions aimed to assess whether the participants considered the statements presented as true or false on a 5-point Likert scale, ranging from 1 (''completely false'') to 5 (''completely true'').

To assess beliefs about safe behaviour on the internet and internet behaviour overall, for the participant as well as for their peers, three sets of statements were created, where the response to the first two sets of statements varied on a 5-point Likert scale, with 1 being "very unsure" and 5 being "very sure". The third set of statements also varied on a 5-point Likert scale, with 1 being "completely false" and 5 being "completely true". It should be mentioned that the scale on beliefs about behaviour on the Internet showed poor internal consistency (α=0,527), so for the purposes of analysis it was considered item by item.

Finally, based on the Theory of Planned Behaviour (Ajzen, 1991), three blocks of questions about risk perception were constructed for the themes of social networks, online video games (gaming) and online gambling, which included items on behavioural beliefs (e.g., '' I don't think playing online is addictive''), normative beliefs (e.g., '' My friends encourage me to play online'') and control beliefs (e.g., '' I can stop playing whenever I decide''). The answers were given on a 5-point Likert scale, ranging varying from 1 (''completely false'') to 5 (''completely true'').

Table 2.1

Internal consistency values of the scales

Scales	Cronbach's Alpha	
Future Behaviours	0,897	Good internal consistency
Beliefs about safe behaviour on the Internet	0,702	Reasonable internal consistency
Beliefs about safe behaviour on the Internet for peers	0,712	Reasonable internal consistency
Beliefs about cybersecurity	0,660	Reasonable internal consistency
Risk perception – gaming	0,654	Reasonable internal consistency
Risk perception – gambling	0,719	Reasonable internal consistency

2.4 Procedure

SICAD made initial contact with ISCTE to collaborate in the evaluation of the narrative on non-substance addictions and problematic use of the Internet (narrative 4) of the "Me and Others" programme.

At the start of the school year, the organisers were invited to take part in this process. Then, based on the ease of combining the time availability of the applicators and the groups of young people, the application classes/groups were chosen.

The questionnaires to be administered in the first and last application sessions were drawn up online using the Qualtrics software. Since not all the applicators and their groups started the programme at the same time, the questionnaires were available the 2022/2023 school year, from September 2022 to June 2023.

The declaration of informed consent was handed out beforehand so that underage students could present it to their parents or guardians and hand it back to the applicator. Schools were responsible for monitoring this process.

Finally, the IMB SPSS software (29 version) was used to analyse the information collected in Qualtrics; repeated measures and multiple linear regression analyses were carried out.

Chapter III

Results

To evaluate the impact of the narrative on non-substance addiction and internet problematic use (narrative 4) of the programme "Me and the Others" (objective 1), repeated measures analysis were conducted with time (T1 and T2) as within subject variable and group (IG and CG) as between subject variables (n = 57; n_{IG} = 43; n_{CG} = 14). Dependent variables were: Future behaviours; Beliefs about safe behaviour; Beliefs about safe behaviour for peers; Beliefs about cybersecurity; Risk perception – gaming; Risk perception – gambling. Items that measure beliefs about general behaviour on the Internet were considered separately.

Contrary to our hypothesis, no significant effects were found for the interaction between time X group for any of the dependent variables considered; only for time significant effects were found. This means that irrespectively of the group, differences were found from T1 to T2. Time was significant for beliefs about safe behaviour, F (1,55) = 4,62, p = ,036, risk perception – gaming, F (1,55) = 15,39, $p < .01$, and for beliefs about general behaviour on the internet item "I know how to control my time", F (1,55) = 9,77, $p < ,01$. For beliefs about safe behaviour, the comparison group presented at T1 and also at T2, more agreement with these beliefs, than participants from the intervention group, F (1,55) = 4,39, p = ,031.

For future safer behaviours (intention) as postulated by Ajzen (1991) the intervention group presented and increase from T1 to T2, but that difference is not statistically different (appendix A).

To analyse whether beliefs can predict future safer behaviour (objective 2), multiple linear regression models were built, considering data from the post-test from participants the intervention group. Results show that around 39% of the variation in those future behaviour (Table 3.1) is explained by the set of predictors under study (*R²adjusted*=0,335). Thus, in addition to beliefs about safe behaviour on the internet

(t=4,664, p<0,001) and beliefs about perceived risk associated with gambling (t=4,525, p<0,001), beliefs about perceived risk associated with gaming also significantly explain future behaviour, with beliefs about safe behaviour on the internet being the most relevant predictor (Beta=0,395). Considering these results, it should be noted that hypothesis 2 was only partially confirmed, since the subjective norm does not predict future behaviour.

The effect of beliefs on future behaviour is that, provided all other factors are equal, the safer young people feel when using the Internet, the more likely they are to continue using it in the future (β=0,417). The same goes for beliefs about perceived risk associated with gambling, i.e., the more "in control" they feel when gambling, the more likely they are to continue gambling in the future (β=0,359). As for the risk perception beliefs associated with gambling, the effect is that the greater the perception of gaming as a risk, the less likely they are to continue gaming in the future (β=-0,194).

Table 3.1

Determining factors of future behaviour (multiple linear regression)

Explanatory variables	GI (137)
	Beta
Beliefs about safe behaviour on the internet	0,395**
Beliefs about safe behaviour on the internet for peers	0,069
Beliefs about internet use - cybersecurity	0,096
Risk perception associated with gaming	-0,154*
Risk perception associated with gambling	0,354**
R^2 adjusted	0,388**
	$F(5,131)=18,278$

*$p<0,05$ **$p<0,001$

Additional descriptive data can be found in appendix B.

Chapter IV

Discussion

Firstly, it's important to mention the relevance of evaluating universal prevention programmes. The timing of a programme's evaluation process allows the programme's weak points to be known, allowing them to be improved, while at the same time making it possible to check whether the proposed objectives have been met (K'CIDADE, 2007). The evaluation demonstrates the impact of the programme on the problem/behaviour in question, as well as its long-term effects, which is why it is important to carry out a follow-up after a certain period (Dusenbury & Falco, 1995).

The main aim of this study was to evaluate the narrative about non-substance addictions and problematic internet use from the "Me and Others" programme, and so two hypotheses were formulated for the study. The first hypothesis was to see if the control group would show an increase in beliefs about safe behaviour after the intervention. The second hypothesis aimed to confirm that attitudes and subjective norms will predict young people's future behaviour, based on the Theory of Planned Behaviour (Ajzen, 1991). The first hypothesis was not confirmed, and the second hypothesis was only partially confirmed.

The results relating to hypothesis 1 of this study indicate that the narrative under evaluation did not produce the desired effect, i.e., the young people in the intervention group did not show a significant increase in beliefs related to safe behaviour after its application. These results could be due to several factors. Firstly, for most of the domains analysed, the intervention group had higher average responses compared to the comparison group during the pretest, although non-significant.

Another aspect to consider as a possible justification for the results obtained concerns the fact that the narrative being analysed deals with various themes at the same time, which on the one hand shows concern and investment in it but may mean that it

does not impact the participants in the way expected. In an attempt to remedy this situation, the application of SAFE practices can be an asset to the programme as they are based on four crucial practices: step-by-step training; active learning; a focus on developing competences; and explicitly defining learning objectives (Durlak et al., 2011). These practices are closely related to the study by Dusenbury and Falco (1995) which, among other practices, reveals the importance of interactive learning as a means of achieving more effective results; the importance of training the implementers/teachers, particularly with regard to an interactive approach to conveying the content of a programme to young people; and the importance of training decision-making, communication, stress management and social skills, as well as the family, social and community component of young people's lives.

Hypothesis 2 was formulated based on the Theory of Planned Behaviour (Ajzen, 1991). This theory supports the idea that behaviour is determined by three variables, behavioural beliefs (beliefs about the consequences of a certain behaviour), normative beliefs (beliefs about the expectations of others) and control beliefs (beliefs about factors that prevent or facilitate the adoption of the behaviour in question). Thus, behavioural beliefs develop the individual's attitude towards behaviour, normative beliefs translate into subjective norms and control beliefs translate into perceived behavioural control (Bosnjak et al., 2020).

That said, in relation to the hypothesis under analysis, it was only possible to confirm that one's beliefs about safe behaviour on the internet explain future behaviour. However, the analysis showed that in addition to these beliefs, beliefs about the perception of risk associated with gaming and gambling also function as predictors of future behaviour.

Considering the Theory of Planned Behaviour, the theory that underpins the hypothesis under analysis, the individual's behavioural beliefs are the genesis of the formation of their attitudes towards a certain behaviour (Bosnjak et al., 2020), thus, and

analysing the results obtained, it is possible to state that they are in line with what is described in the literature. According to this theory, the intention to adopt a certain behaviour increases the more favourable the attitude towards that behaviour (Ajzen, 1991). However, a favourable subjective norm is also required (Ajzen, 1991), and in this study this result was not obtained. This may be due to the fact that although the entire sample was made up of young people, their ages varied significantly, ranging from 13 to 16 years old, which may have an impact on peer influence. That said, it can be assumed that the intervention group will adopt safer behaviours on the Internet after the intervention, since their beliefs about these behaviours predict their future behaviours.

It is important to mention the presence of beliefs related to the perception of gaming and gambling risk are predictors of future behaviour. These results are in line with previous evidence: The perception of risk is a fundamental predictor of the adoption of safer behaviours (Van Schaik et al., 2017; Alexande et al., 2023), and it is expected that the adoption of these behaviours will occur due to the perception of negative consequences that the behaviour to be changed may entail, as well as the benefits that the adoption of safe behaviour entails (van der Pligt, 1998).

We feel it is necessary to point out some limitations of this study. Firstly, it is important to mention the fact that the number of participants in both groups is not the same, since for the purposes of evaluating the narrative, 49 participants in the comparison group and 192 participants in the intervention group were considered. Furthermore, in terms of age, the groups show statistically significant differences ($t(302.7)=-4,377$, $p<0,00$), which is related to the fact that the comparison group is only made up of students in the 8th and 9th year of the 3rd cycle, while the intervention group is made up of young people between the 7th year of the 3rd cycle and the 12th year of secondary school.

Another factor to consider as a limitation of the study is that it was not possible to consider all the participants for evaluation purposes, due to failures in the pairing of

answers between the three questionnaires applied, i.e. it was not possible to pair the participants' answers between pretest, pretest and post-tests, due to failures in memorising the identification code created and used by each of the participants.

Bearing in mind that the "Me and Others" programme will continue to be implemented, this work will allow improvements to be made based on the limitations presented and on the recommendations that will be made below.

Considering future directions, in terms of evaluation, it would be important to consider some changes to the instrument used, i.e., the questionnaire currently being used is excessively long, which could explain the loss of participants between pretest and pretest, and between both and the post-test, because the young people were unfocused and exhausted due to the length of the questionnaire. It would be interesting to review this instrument, making it more appealing and less extensive.

Also, for evaluation purposes, it would be pertinent to consider other variables that could influence the impact of the programme and that are not currently being considered, namely in relation to the implementers ("Game Masters"). This would be the case, for example, of managing the expectations of the applicators, since their perception of the effectiveness of the application may not correspond to their expectations, which in turn will trigger feelings such as anger and anxiety, as well as causing them to lose responsibility for their role as applicators (McConnellogue & Storey, 2017). The perception of the implementers, in this case teachers, of the support and cooperation provided by the rest of the school community in which they are inserted can also affect their perception of self-efficacy (Sela-Shayovitz, 2009), which will consequently influence their performance as implementers of the programme.

In conclusion, the relevance of universal prevention programmes about gaming and gambling is increasingly relevant and necessary, due to the high numbers of young people who adopt this type of risky behaviour. It will therefore be necessary to continually evaluate these programmes to improve them and adapt them to the constant

changes taking place in the technological environment, particularly the growing number of new online betting and gaming sites, which are always innovative and created with the aim of capturing the attention of the younger population. Universal prevention of these behaviours could prevent an increase in the number of young people with non-substance addictions, alerting them to the risks and consequences.

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APPENDICES

Appendix A - Descriptive Statistics for Future Behaviour (intention)

Table

Future behaviours (descriptive statistics)

Scales (Time)	Group	M	SD
Beliefs about safe behaviour (T1)	CG	1,914	,524
	IG	2,223	,623
Beliefs about safe behaviour (T2)	CG	1,671	,41958
	IG	2,0698	,63977

Appendix B - Future behaviours and beliefs by group (descriptive statistics)

Table

Future behaviours and beliefs by group (descriptive statistics)

	GC		GI	
	Mean	**DP**	**Mean**	**DP**
Future behaviour (1=very unlikely to 5=very likely)	1,3	0,55	1,6	0,68
Beliefs about safe behaviour on the internet	2,0	0,58	2,0	0,65
Beliefs about safe behaviour on the internet for peers	1,7	0,53	2,0	0,76
Beliefs about internet use - cybersecurity	2,3	0,64	2,4	0,67
Risk perception associated with gaming	2,6	0,65	2,6	0,54
Risk perception associated with gambling	2,1	0,63	2,2	0,68