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Chapter 1

General Introduction

Rationale and aims

Suicide is the second leading cause of death among adolescents in the Netherlands with an average of fifty suicides each year among those below 20 years of age (Statistics Netherlands, 2014). Despite fluctuations this number has stayed relatively stable over the past years (see Figure 1; Statistics Netherlands, 2014). The magnitude of this problem is unfortunately far more extensive among adolescents than the number of officially registered suicides suggests. It has been reported that every year 11.2% of adolescents in the Netherlands has suicidal thoughts and 6.6% attempts suicide or engages in deliberate self-harm (Dijkstra, 2010). In 2011 alone 4510 adolescents in the age range 0–24 years were treated in a hospital emergency department and 2131 were hospitalized as a result of injuries caused by their suicidal behavior (The National Public Health Compass, 2013). Moreover, several studies have shown that adolescents from ethnic minority groups in the Netherlands more often report suicidal ideation and suicide attempts compared to their Dutch peers (GGD Rotterdam-Rijnmond, 2009; Van Bergen, 2009). These trends and numbers indicate the importance of implementation of adolescent suicide prevention strategies in the Netherlands, and furthermore emphasize that these strategies should incorporate the ethnicity component in their approach.
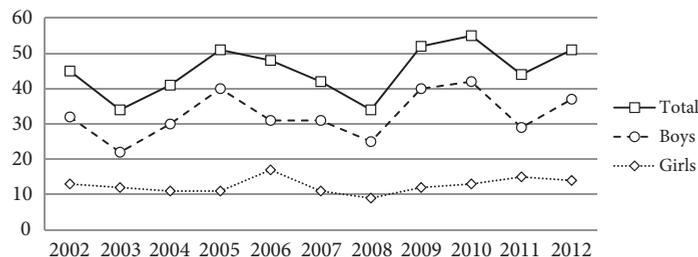

Figure 1. Suicide Numbers Among Dutch Adolescents (– 20 years) from 2002 to 2012

In 2009 a group of experts was assigned by the Dutch government the task to make an inventory of suicide prevention and intervention programs (De Groot, Kerkhof, & Ponti, 2009). The resulting overview highlighted, among many other things, that there is a need for suicide prevention educational programs targeting gatekeepers. As a result, in 2011 the departments of Clinical- and Developmental Psychology at VU University in Amsterdam started a government funded program named Mental Health Online (MHO), which aimed to stimulate suicide prevention among adolescents by educating gatekeepers through a relatively new way of education, e-learning modules. The studies resulting from this program are reported in this

1

dissertation. The main goals of these studies were to develop (1) and subsequently investigate the effectiveness (2) and acceptability (3) of adolescent suicide prevention e-learning modules targeting gatekeepers. As the background and rational of these studies are discussed at length in the following chapters, this introductory chapter only presents an introduction to the main concepts treated in this dissertation and an overview of studies reported in the next chapters.

Definitions

The term 'suicide' has been defined variously in the literature, but whether the definitions are derived from a sociological, psychological or existential theoretical point of view they all have one characteristic in common which is that the person 'intentionally ends his/her own life' (De Leo, Burgis, Bertolote, Kerkhof, & Bille-Brahe, 2006). In this dissertation, the definition of suicide by the World Health Organization is used: *'the act with fatal outcome which was deliberately initiated and performed by the deceased, in the knowledge or expectation of its fatal outcome, and through which the deceased aimed at realizing changes he/she desired'* (WHO, 1998, p. 3).

The term 'suicide attempt' used in this dissertation is defined as: *'an act with a non-fatal outcome, in which an individual deliberately initiates a non-habitual behavior that, without intervention from others, will cause self-harm, or deliberately ingests a substance in excess of the prescribed or generally recognized therapeutic dose, and which is aimed at realizing changes which the subject desired via the actual or expected physical consequences'* (WHO, 1998, p.3).

'Suicidality' is the term which is used in this dissertation to address every behavior, action and thought related to suicide.

Historically, two groups of 'gatekeepers' have been distinguished: the designated or the emergent group (Isaac et al., 2009). The first group consists of professionals who are trained in suicide prevention and have actually been labeled as helping professionals (such as psychologists or general practitioners), while the second group consists of community members who may not have received training, but can emerge as a potential gatekeeper (for example teachers and counsellors; Isaac et al., 2009). In this thesis gatekeepers are defined as: '*professionals who due to their profession come in contact with adolescents at-risk for suicide*' (Gould & Kramer, 2001; WHO, 2012).

Lastly, in this dissertation 'e-learning' is defined as the use of internet to transfer knowledge to the learner, in this case the gatekeeper (Welsh, Wanberg, Brown, & Simmering, 2003), and modules as packed pieces of information which are presented as a unit.

Gatekeepers are *key figures*

The reason why gatekeepers can serve as excellent key figures for adolescent suicide prevention has to do with their frequent contact with adolescents. As a result, they can be among the first to detect the warning signs associated with suicide. Unfortunately, many gatekeepers are unfamiliar with the essential knowledge, attitudes and skills which are required when dealing with an adolescent at-risk for suicide. Consequently, they sometimes fail to recognize adolescents at-risk for suicide, or lack the self-confidence and skills to assist them even if they succeed to detect adolescents in need for help. For this reason, gatekeeper training has been recommended as an important suicide prevention strategy (Isaac et al., 2009; Mann et al., 2005; WHO, 2012).

Traditional approach

Suicide prevention interventions mainly focus on education and awareness about the topic and/or screening for individuals who are at high-risk to engage in suicidal behavior (Isaac et al., 2009). These two components lie at the core of every gatekeeper training which aims to help gatekeepers develop the required knowledge, attitudes and skills to detect people at-risk for suicide, and to guide and refer them for further help (Gould, Greenberg, Velting, & Shaffer, 2003; Isaac et al., 2009; Mann et al., 2005; Quinnett, 2012; WHO, 2012). The traditional gatekeeper training consists of an in-person meeting between an instructor and gatekeepers. As with any other training, variations can be found in the format (e.g. workshop, session(s) and classroom) and the length of the training (from one hour to days). Nevertheless, the main objectives of the gatekeeper training are to create awareness and recognition of suicidal warning signs, intervention techniques, the available community resources and how to refer a person in need for further assistance which as a result should lead to better screening and suicide prevention.

         Although research regarding the effectiveness of gatekeeper training is limited, the studies conducted in this area are promising (Isaac et al., 2009; Mann et al., 2005; Robinson, Malone, Williamson, Baldwin, Fletcher, & O'Brien, 2013; Van der Feltz-Cornelis et al., 2011; Walsh, Hooven, & Kronick, 2013).

         During a series of meetings with gatekeepers across the nation organized by the main researcher of the MHO program, Dutch gatekeepers revealed that several obstacles stand in their way of attending a gatekeeper training on adolescent suicide prevention. First, gatekeepers working in schools pointed out that the topic of adolescent suicidality does not always receive the broad attention it needs within the school due to the fear of the school board to be depicted

1

to the outside world – and mainly the parents – as a school in which 'suicidality' is an issue. Second, it was pointed out that the work schedule of gatekeepers is extremely full and although many wish to attend trainings in different mental health related topics, suicide prevention included, they do not always have the time to do so. Finally, gatekeepers mentioned that they are on a schooling budget and training in any topic is costly. As a result, gatekeepers are forced to choose usually other themes for training than suicide prevention that have higher priority on their lists.

E-learning modules as an alternative

Internet has become a dominant and essential tool for communication and information transfer in the Netherlands. As of 2011, 94% of the Dutch households have access to the internet and 86% of the users go online daily or almost every day (Statistics Netherlands, 2014). Given its widespread availability and use we thought that internet would be an ideal medium for the distribution of a suicide prevention training program for gatekeepers. From the perspective of efforts aimed at enhancing adolescent suicide prevention this medium could serve as a great system for the distribution of the content of traditional in-person gatekeeper training after implementation in and offered through e-learning modules. This way the main barriers that prohibit gatekeepers from attending (traditional in-person) gatekeeper training could be removed. By providing the training online, gatekeepers would get the opportunity to follow the training without any restrictions associated with time, location, or distance, and in addition promote unlimited access to information and take away social restrictions (Arbaugh, 2000; Berger, 1999; Tham, & Werner, 2005). Moreover, if the training can be composed and maintained with limited resources, the budget obstacle would be resolved as well.

The use of e-learning modules in particular has several additional advantages. First, the content of the suicide prevention training can be divided in multiple modules. This flexibility gives the user the opportunity to only follow the content in which he/she is interested in, and gives gatekeepers the possibility to put together a custom-made training based on their needs. Second, instead of a lengthy training, gatekeepers get the chance to spread the training across time and take in the content whenever suitable. Lastly, there are several software packages available which make it easy to develop e-learning modules without prior knowledge in computer and information technology. Thus, costs with regard to the development and maintenance of the modules can be reduced so that the training fee can be kept low.

Outline of the thesis

As mentioned earlier, the main goals of this dissertation were to develop (1) and subsequently investigate the effectiveness (2) and acceptability (3) of adolescent suicide prevention e-learning modules targeting gatekeepers. These three goals have been addressed in studies reported in the two parts of this dissertation. The first part includes the research that was necessary to develop the e-learning modules (chapter two, three and four) and the second part contains the studies that were needed in order to determine the effectiveness and acceptability of the developed e-learning modules (chapter five, six, seven).

Three essentials steps have contributed to the developmental process of the modules, and thus have been embedded into the first part of this dissertation. Firstly, it was necessary to get an insight in the perception and needs of the users with regard to the e-learning modules so that the final product would fulfill the user's wishes and desires. As a result, *chapter two* of this dissertation presents the results of a survey addressing the experience of – school based – gatekeepers with adolescent suicidality, and attitudes regarding adolescent suicide as a theme and e-leaning modules as a potential tool for suicide prevention training. Secondly, it was important to get an overview of the existing research in the area of suicide prevention e-learning modules so that the available knowledge could be used in the development of the e-learning modules. Thus, *chapter three* presents the results of a systematic review on the currently available suicide prevention e-learning modules and their effectiveness. Lastly, the results of the previous two steps were translated into a framework which served as the rationale behind the development of the programs. Therefore, in *chapter four* the rationale behind an online adolescent suicide prevention program for gatekeepers in the Netherlands is discussed.

After completing the developmental phase, it was necessary to test the effectiveness and acceptability of the developed e-learning modules. The two studies conducted to test both aspects are embedded in the second part of this dissertation. *Chapter five* describes the study protocol of a *randomized controlled trial* (RCT) in which the effectiveness of adolescent suicide prevention e-learning modules designed for gatekeepers were tested, while *chapter six* presents the results of this trial. In *chapter seven*, the results of an evaluation study are presented in which the experiences of gatekeepers with the adolescent suicide prevention e-learning modules were investigated.

Finally, *chapter eight* contains the general discussion of the results and limitations of the studies presented in this dissertation, as well as recommendations for future research.

1

References

Arbaugh, J. B. (2000). Virtual classroom characteristics and student satisfaction with internet-based MBA courses. *Journal of Management Education*, *24*(1), 32-54.

Berger, N. S. (1999). Pioneering experiences in distance learning: lessons learned. *Journal of Management Education, 23*, 684-689.

De Groot, M., Kerkhof, A. J. F. M., & De Ponti, K. (2009*). Onderzoek naar aspecten van suïcide in Nederland 2008-2012: Een quick scan.* Retrieved from GGZ Nederland website: http://www.ggznederland.nl/kwaliteit-van-zorg/suicidepreventie/quick-scan-definitief.pdf

De Leo, D., Burgis, S., Bertolote, J. M., Kerkhof, A. J., & Bille-Brahe, U. (2006). Definitions of suicidal behavior. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, *27*(1), 4-15.

Dijkstra, M. (2010). *Factsheet preventie van suïcidaliteit* [Fact sheet]. Received from: http://www.trimbos.nl/webwinkel/productoverzicht-webwinkel/preventie/af/af0933-factsheet-preventie-van-suicide

GGD Rotterdam-Rijnmond (2009). *Jeugdmonitor Rotterdam. Rapportage gemeente Rotterdam.* Retrieved from: http://www.rotterdam.nl/COS/publicaties/MOR/055 Jeugdmonitor Rijnmond Rapportage gemeente Rotterdam 2009.pdf

Gould, M. S., Greenberg, T. E. D., Velting, D. M., & Shaffer, D. (2003). Youth suicide risk and preventive interventions: A review of the past 10 years. *Journal of the American Academy of Child & Adolescent Psychiatry*, *42*(4), 386-405.

Gould, M. S., & Kramer, R. A. (2001). Youth suicide prevention. *Suicide and Life-Threatening Behavior*, 31, 6-31.

Isaac, M., Elias, B., Katz, L. Y., Belik, S. L., Deane, F. P., Enns, M. W., & Sareen, J. (2009). Gatekeeper training as a preventative intervention for suicide: A systematic review. *Canadian Journal of Psychiatry, 54*(4), 260-268.

Mann, J. J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., ... & Hendin, H. (2005). Suicide prevention strategies: A systematic review. *JAMA*, *294*(16), 2064-2074.

Quinnett, P. (2012). *QPR gatekeeper training for suicide prevention: The model, rationale and theory.* Retrieved from http://www.qprinstitute.com/pdfs/QPR Theory Paper.pdf

Robinson, J., Cox, G., Malone, A., Williamson, M., Baldwin, G., Fletcher, K., & O'Brien, M. (2013). A systematic review of school-based interventions aimed at preventing, treating, and responding to suicide-related behavior in young people. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, *34*(3), 164.

Statistics Netherlands (2014). *Statline.* Retrieved from: http://statline.cbs.nl/statweb/?LA=en

Tham, C. M., & Werner, J. M. (2005). Designing and evaluating e-learning in higher education: A review and recommendations. *Journal of Leadership & Organizational Studies*, *11*(2), 15-25.

The National Public Health Compass (2013). *Hoe vaak kom zelftoegebracht letsel voor en hoeveel mensen sterven eraan?* Retrieved from: http://www.nationaalkompas.nl/gezondheid-en-ziekte/ziekten-en-aandoeningen/letsels-en-vergiftigingen/zelftoegebracht-letsel/omvang/

Van Bergen, D.D. (2009). *Suicidal behavior of young migrant women in the Netherlands: A comparative study of minority and majority women.* (Doctoral dissertation). VU University, Amsterdam.

Van der Feltz-Cornelis, C. M., Sarchiapone, M., Postuvan, V., Volker, D., Roskar, S., Grum, A. T., ... & Hegerl, U. (2011). Best practice elements of multilevel suicide prevention strategies: A review of systematic reviews. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, *32*(6), 319-333.

Walsh, E., Hooven, C., & Kronick, B. (2013). School-wide staff and faculty training in suicide risk awareness: Successes and challenges. *Journal of Child and Adolescent Psychiatric Nursing*, *26*(1), 53-61.

Welsh, E. T., Wanberg, C. R., Brown, K. G., & Simmering, M. J. (2003). E-learning: Emerging uses, empirical results and future directions. *International Journal of Training and Development*, *7*(4), 245-258. http://dx.doi.org/10.1046/j.1360-3736.2003.00184.x

World Health Organization (1998). Primary prevention of mental, neurological and psychological disorders. Suicide. Geneva: WHO.

World Health Organization. (2012). *Public health action for the prevention of suicide: A framework*. Retrieved from: http://apps.who.int/iris/bitstream/10665/75166/1/9789241503570_eng.pdf