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VIOLENCE RISK ASSESSMENT IN WOMEN

The value of the Female Additional Manual

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Women and girls represent only a minority in the penitentiary system and in forensic mental health care. About 6%–10% of both prison and forensic psychiatric populations in Western countries comprise women (see for the most recent official statistics in the UK www.gov.uk/government, in Canada www.statcan.gc.ca, and in the US www.bjs.gov). However, there seems to be widespread agreement that in the past 20 years female offending has been on the rise, especially violent offending and particularly among young women (Miller, Malone, and Dodge, 2010; Moretti, Catchpole, and Odgers, 2005). Overall, a disproportionate growth of females entering the criminal justice system and forensic mental health care has been observed in many countries (for reviews, see Nicholls, Cruise, Greig, and Hinz, 2015; Odgers, Moretti, and Reppucci, 2005; Walmsley, 2015). In addition, it should be noted that the ‘dark number’ for women is suggested to be bigger than for men. Official prevalence rates of female offending might constitute an underestimation as women usually commit less reported offences, for example, domestic violence (Nicholls, Greaves, Greig, and Moretti, 2015). Furthermore, it has been found that – if apprehended – girls and women are treated more leniently by professionals and the criminal justice system. Generally, they receive lower prison sentences and are more often admitted to civil psychiatric institutions instead of receiving a prison sentence or mandatory forensic treatment after committing violence (Javdani, Sadeh, and Verona, 2011; Jeffries, Fletcher, and Newbold, 2003). Hence, although female offenders compared to male offenders are a minority, female violence is a substantial problem that deserves more attention. Our understanding of female offenders is hindered by the general paucity of theoretical and empirical investigations of this population. In order to improve current treatment and assessment practices, our knowledge and understanding of female offenders should be enlarged and optimised (de Vogel and Nicholls, 2016).

One of the relevant questions is whether gender-sensitive violence risk assessment is needed. The use of structured violence risk assessment tools has become common practice in (forensic) mental health care and criminal justice settings. Violence risk assessment provides insight into risk and protective factors and offers concrete guidelines for risk management and treatment and is thus of great importance for society as well as for patients/offenders. In the past two decades, major progress has been made in the area of structured assessment of

risks of violent or sexual reoffending and multiple tools are available to guide mental health professionals in this process. It is often assumed that these tools are ‘gender-neutral’ (see for a discussion Yesberg, Scanlan, Hanby, Serin, and Polaschek, 2015). However, the majority of risk assessment instruments have been developed based on violence risk research conducted primarily in male samples. Moreover, research into the psychometric properties of these tools has been carried out mostly with men. To date, only a few risk assessment instruments are available that take gender into account. An example is the *Early Assessment Risk List for Girls* (EARL-21G; Levene *et al.*, 2001) that was developed for antisocial behaviour in girls between 6 and 12 years old. This tool contains risk factors valid for both boys and girls, but also includes two items specific to girls: *caregiver-daughter interaction* and *sexual development*. The reliability, predictive validity, and clinical applicability of the EARL-21G have been found to be good (Augimeri, Enebrink, Walsh, and Jiang, 2010). The *Female Additional Manual* (FAM; 2014) is a gender-sensitive risk assessment guideline for adult female (forensic) psychiatric patients that has been developed as an addition to the widely used *Historical Clinical Risk Management-20* (HCR-20; Webster, Douglas, Eaves, and Hart, 1997), or its revision, the *Historical Clinical Risk Management-20, Version 3* (HCR-20^{V3}; Douglas, Hart, Webster, and Belfrage, 2013). The aim of the FAM is to provide mental health professionals with a comprehensive violence risk assessment that offers additional guidelines for risk management in women.

In this chapter, the development of the FAM will be discussed as well as some preliminary empirical results with the tool. A clinical case example will be presented to illustrate the value of using the FAM in addition to the HCR-20^{V3} in daily forensic practice. First, the literature about violent offending by women will be discussed as well as gender-specific risk and protective factors and the value of commonly used risk assessment instruments for female offenders.

Violent offending by women

Generally, the nature, severity, frequency, and victims of violent offending by women are significantly different from those committed by men. Research has demonstrated that female violence is more often reactive and relational and less often characterised as instrumental and sexual. Furthermore, violence by women less often results in serious injuries and is less visible and more subtle – for instance, in intimate partner violence and child abuse (Nicholls, Greaves *et al.*, 2015; Odgers *et al.*, 2005). Women seem to have different reported motives for violent offences. Motives for violence by women can, for example, include jealousy, self-defence, and feeling disrespected by the other, whereas motivations for men can more often be antisocial or ego-driven, or result from peer pressure (Kruttschnitt and Carbone-Lopez, 2006).

Domestic violence

A substantial growth can be observed in the number of studies into female perpetrators of intimate partner violence. While most risk assessment instruments for intimate partner violence still take the view of male perpetrators and female victims, numerous studies have shown that intimate partner violence is often bidirectional and that the prevalence rate of intimate partner violence by women is comparable to that by men (see for an overview Desmarais, Reeves, Nicholls, Telford, and Fiebert, 2012). There may be differences, though, in type

and severity of violence, with women showing more subtle, emotional, and verbal violence and men more physical violence (see Archer, 2017; Stockdale, Tackett, and Coyne, 2013).

Sexual violent offending by women

According to a recent meta-analysis (Cortoni, Babchishin, and Rat, 2016), a small proportion (2.2%) of sexual offences reported to the police are committed by women. In contrast, victim surveys indicated prevalence rates that were six times higher than police data (11.6%). However, establishing the prevalence rate of female sexual offending is quite complicated. Traditional role expectations can result in victims less often reporting sexual victimisation by women (Anderson, 2005). Especially male victims may feel ‘emasculated’ having been victimised by the ‘weaker sex’, and may worry about the reactions of those around them. Men may be afraid they will not be regarded as ‘real men’ because real men are supposed to always want sex and to always enjoy it (the ‘this would not happen to a real man’ cliché) (Faller, 1987). Furthermore, when a man is victimised, he is expected not to be upset or affected and it is not appropriate for him to show his emotions (Davies, Gilston, and Rogers, 2012); this may also serve as a barrier to reporting the crime to the police. Female victims may be afraid that people will question their sexual orientation: similar fears were reported by male victims of sexual abuse who have been abused by a male perpetrator (Alaggia, 2005).

Society traditionally expects women to be non-aggressive and to be nurturers (Saradjian, 2010). Violent behaviour by women is considered inappropriate and does not fit in with female role expectations. Even if this behaviour is acknowledged as sexually abusive, there is a tendency to minimise the damage of the abuse, or not to interpret the interaction of a child victim with a female perpetrator as abuse (Anderson and Struckman-Johnson, 1998; Finkelhor, 1984, as cited by Saradjian, 2010).

According to a review by Johansson-Love and Fremouw (2006), female sexual offenders are more likely to have been sexually victimised than other (offender) populations and they commit serious forms of sexual abuse. More recent studies report that most offenders have a male co-offender (who is often their romantic partner) (e.g., Gillespie *et al.*, 2015; Wijkman, Bijleveld, and Hendriks, 2010). The average age at which the offenders commit the abuse is over 30 years, which seems older than their Dutch male counterparts (Blokland and van der Geest, 2015). Some offence characteristics are still debated, however, including the preferred victim gender and relationship to the victim.

Inpatient violence by women

Violence within (forensic) psychiatric or criminal justice settings can have major impact on victims and witnesses and may lead to other impacts, such as high financial costs (e.g., employee sick leave). Thus, it is important to not only consider and assess risk for violence in society but also pay attention to inpatient violence (Verstegen, de Vogel, de Vries Robbé, and Helmerhorst, 2017). It has repeatedly been demonstrated that female psychiatric patients cause at least as many violent incidents as male psychiatric patients (Dack, Ross, Papadopoulos, Stewart, and Bowers, 2013; de Vogel, Stam, Bouman, ter Horst, and Lancel, 2016; Nicholls *et al.*, 2009; Verstegen *et al.*, 2017). However, the nature of inpatient violence committed by female patients might be different from inpatient violence committed by their male counterparts. It has been found that violent incidents by female psychiatric patients were less likely to

result in serious injury compared to violent incidents by male psychiatric patients (Krakowski and Czobor, 2004) and female inpatient violence seems more often directed towards staff instead of patients (de Vogel *et al.*, 2016).

Risk factors for violence in women

Most risk factors for violent or antisocial behaviour, such as previous violence, young age at first violent act, and substance abuse, have been found to be valid for both men and women (Andrews *et al.*, 2012; Brennan, Breitenbach, Dieterich, Salisbury, and van Voorhis, 2012). However, there are a few risk factors that are valid only for girls and women or that have a different impact on women compared to boys and men, such as pregnancy at a young age (Messer, Maughan, Quinton, and Taylor, 2004), prostitution (Morgan and Patton, 2002), and self-harm (Blanchette and Brown, 2006; Völlm and Dolan, 2009). An example of a risk factor that manifests differently in women compared to men and may have a different impact on the risk of recidivism is psychopathy.

Psychopathy as a risk factor in women

Psychopathy has been found to be an important risk factor for (violent) recidivism in different populations and settings (Leistico, Salekin, Decoster, and Rogers, 2008; Storey, Hart, Cooke, and Michie, 2016). The *Psychopathy Checklist-Revised* (PCL-R; Hare, 2003) is a widely used tool to assess psychopathy. However, the majority of studies of psychopathy and the PCL-R have been conducted in male samples, and the assumption that the conceptualisation of psychopathy can be generalised to women has not been sufficiently proven (Kreis and Cooke, 2012). Although the PCL-R is assumed to have relevance in female offenders, mainly in violence risk assessment (Nicholls, Ogloff, Brink, and Spidel, 2005), concerns have been expressed about whether the PCL-R captures the construct of psychopathy satisfactorily in women (Forouzan and Cooke, 2005; McKeown, 2010). It has been suggested that because women demonstrate fewer antisocial behaviours and generally have a later onset of antisocial behaviour than men, several of the PCL-R items are less suitable to assess the core traits of psychopathy in women (Dolan and Völlm, 2009). Hence, some PCL-R items might not be adequately assessing the construct of psychopathy as it is expressed in women and it might be useful to formulate the items differently for women. Furthermore, it might be useful to lower the official PCL-R cut-off score for women (Weizmann-Henelius *et al.*, 2010).

Psychopathy is often incorporated in risk assessment tools, like the HCR-20. In the gender-sensitive addition to the HCR-20, the FAM, a lower PCL-R cut-off score of 23 instead of the official PCL-R cut-off score of 30¹ is applied. This lowered cut-off score should be seen as provisional and may not result in negative consequences for the woman, such as exclusion of treatment. Still, the lowered PCL-R cut-off score for women could be helpful in treatment as it may provide insight and understanding into the more subtle behaviour of women with high levels of psychopathy and may help to be more attentive to manipulative behaviour. Recent research in a Dutch multicentre sample demonstrated that women with a PCL-R score of 23 or above showed different patterns in criminal offending compared to women with a PCL-R score below 23. They had more diverse patterns of offending, more stranger victims, and more antisocial motivations for offending (Klein Tunte, de Vogel, and Stam, 2014). At the same time, however, distinctive differences were found between women high

on psychopathy (PCL-R score 23 or above) and men high on psychopathy (PCL-R score of 30 or above). Most importantly, women had more often a co-morbid borderline personality disorder (BPD) and more often relational motives for violence, and showed more manipulative behaviour during treatment (de Vogel and Lancel, 2016). In this study, the predictive validity of the PCL-R for physical violence during treatment was found to be good for men and moderate for women. When verbal violence was included in the definition of violence, the predictive validity of the PCL-R was good for both women and men.

The value of commonly used risk assessment instruments in women

Research has demonstrated that unstructured clinical judgment of violence risk is sensitive to sex-based biases and that mental health professionals of both genders tend to underestimate the risk for violence in female psychiatric patients (Skeem *et al.*, 2005). Use of structured risk assessment tools is recommended to avoid these types of biases. However, most widely used structured risk assessment tools are developed based on violence risk research conducted primarily in male samples. Moreover, research into the psychometric properties of these tools has been carried out mostly on men. Garcia-Mansilla, Rosenfeld, and Nicholls (2009) reviewed the literature on different methods of violence risk assessment in a range of female populations. They concluded that structured methods of risk assessment are more accurate than unstructured methods, but that overall, the research supporting the applicability of violence risk assessment tools in female populations remains equivocal. McKeown (2010) also conducted a literature review on violence risk assessment in women and concluded that more research is needed with a particular focus on additional risk factors for women. More recently, a systematic review of nine risk assessment tools used in 15 studies including adult female offenders was carried out by Geraghty and Woodhams (2015). They concluded that none of the measures demonstrated strong predictive validity in female populations. A similar conclusion was drawn with respect to risk assessment in adolescent girls. In their review, Emeka and Sorensen (2009) stated that risk assessment tools have less predictive power in girls than in boys and that there is a need to develop gendered risk assessment instruments.

Actuarial risk assessment instruments

A few actuarial risk assessment tools have been developed or adapted for use with female offenders. Usually, these tools are developed for female prisoners and are not validated for forensic psychiatric patients. The *Level of Service Inventory* (LSI; Andrews and Bonta, 2000) is a widely used actuarial risk assessment tool for general recidivism, that was found to be the most effective – albeit not very convincingly – tool in predicting both violent and general recidivism in the review of Geraghty and Woodhams (2015). Although experts have advocated for the use of LSI with both genders (e.g., Dowden and Andrews, 1999), there remains debate with respect to its application to women (van Voorhis *et al.*, 2010). A group of American researchers has adapted the LSI for use in women to predict general recidivism (see Salisbury *et al.*, 2009; van Voorhis *et al.*, 2010). The results for this adapted LSI for women show that both gender-sensitive factors and gender-neutral factors were predictive of misconduct in prison and general recidivism after release (Salisbury *et al.*, 2009; van Voorhis *et al.*, 2010).

Furthermore, a few actuarial instruments have been developed specifically for female offenders. The Women's Risk Needs Assessments (van Voorhis *et al.*, 2008; van Voorhis, Wright, Salisbury, and Bauman, 2010; see for recent research results www.uc.edu/womenoffenders/about.html) are actuarial tools that assess both gender-neutral (e.g., substance abuse, criminal history, financial problems) and gender-responsive (e.g., sexual trauma, mental health issues, relationship conflict) factors in female prisoners. The *Security Reclassification Scale for Women* (SRSW: Blanchette and Taylor, 2007) was developed to anchor security-level review decisions for federally sentenced female offenders in Canada. To our current knowledge, no empirical results have been published yet regarding the value of these actuarial tools.

Structured professional judgment instruments

Several studies with female populations have been conducted about risk assessment instruments applying the *structured professional judgment* (SPJ) method, in which information should be integrated, combined, and weighed to come to a structured, individualised assessment (see Douglas *et al.*, 2013). The HCR-20 is the most widely used SPJ risk assessment instrument in forensic psychiatry worldwide (Singh *et al.*, 2014). Nicholls, Ogloff, and Douglas (2004) examined the HCR-20 in female and male civil psychiatric patients. They found good predictive validity for inpatient violence and modest levels of predictive accuracy for the occurrence of any violence in the community for both sexes. Predictive accuracy for physical violence in the community was significant for men, but not for women, except for the Historical subscale. De Vogel and de Ruiter (2005) examined the HCR-20 in a group of Dutch female forensic psychiatric patients and a matched group of male patients. For men, the HCR-20 total score demonstrated good to excellent predictive validity for violent outcomes. For women, only the HCR-20 final risk judgment, but not the HCR-20 total score, demonstrated significant predictive validity for violent outcomes. Thus, while addition of individual HCR-20 risk factors was not adequate in predicting violence risk in female patients, the SPJ method of integrating and combining factors based on the HCR-20 seemed to perform well. More recently, O'Shea, Mitchell, Picchioni, and Dickens (2013) conducted a meta-analysis and found that the HCR-20 had the best predictive efficacy among samples containing higher proportions of women, patients with schizophrenia, and Caucasians. In 2013, a revised version of the HCR-20 was introduced: the HCR-20^{V3} (Douglas *et al.*, 2013). To date, little is known about the predictive validity of the HCR-20^{V3} for women. Green and colleagues (2016) evaluated the HCR-20^{V3} with 24 female and 100 male insanity acquittals and found that women exhibited similar risk factors as men, although two items were rated higher for women (*relationships* and *traumatic experiences*). The relationship between scale scores and violence was higher among men than women, although gender was not a significant moderator in logistic regression analyses predicting likelihood of violence.

The *Short-Term Assessment of Risk and Treatability* (START; Webster, Martin, Brink, Nicholls, and Desmarais, 2009) is a widely used SPJ tool for short-term violence risk assessment. This tool contains only dynamic factors that can be coded both as a risk and as a strength. O'Shea and Dickens (2015) examined the predictive validity of the START in a sample of secure psychiatric patients using START codings by multidisciplinary teams of mental health professionals. They found the START to be a stronger predictor of aggression and self-harm in women than men. In a Canadian study, it was found that female forensic psychiatric patients who made successful returns to the community had significantly higher START strength

scores (e.g., treatability, insight, social support) compared to women who were still in recovery (Viljoen, Nicholls, Greaves, de Ruiter, and Brink, 2011).

A few studies have been conducted of the predictive validity for girls of the *Structured Assessment of Violence Risk in Youth* (SAVRY; Borum, Bartel, and Forth, 2006), a tool to assess violence risk in adolescents. Overall, it can be concluded that there is significant predictive validity for the SAVRY in girls; however, there may be differences in the relevance of individual items (Lodewijks, de Ruiter, and Doreleijers, 2008; Penney, Lee, and Moretti, 2010). For example, significantly higher scores were found for adolescent girls compared to boys on the SAVRY risk factor *history of self-harm or suicide attempts* and on the protective factor *positive attitude towards intervention and authority* (Lodewijks et al., 2008).

In summary, it seems that SPJ tools like the HCR-20, HCR-20^{V3}, START, and SAVRY have some predictive value and can be used reliably in female populations. However, the assessor should be cognisant of the limited and ambivalent research results in females and exert caution in the interpretation of the results, especially when important decisions need to be made – for example, regarding mandatory admittance to a hospital or discharge. It is also recommended to adhere to the SPJ principles in arriving at an individualised final risk judgment and not simply sum up the risk factors.

Protective factors in women

A comprehensive evaluation of violence risk should take into account both risk and protective factors (see also Chapter 10). Evidence has been found that girls and women respond differently to protective factors compared to boys and men. For example, in several studies close family ties, positive social relationships, sound finances, and being religious were found to have a stronger protective effect on girls and women than on boys and men (Hart, O'Toole, Price-Sharps, and Shaffer, 2007; Hawkins, Graham, Williams, and Zahn, 2009; Rodermond, Kruttschnitt, Slotboom, and Bijleveld, 2016). Rodermond and colleagues (2016) reviewed the literature about gender differences in desistance and suggested that the positive effects of family, social network, and community factors are particularly strong for women in combination with a willingness or motivation to change and a sense of agency.

The *Structured Assessment of Protective Factors for violence risk* (SAPROF; de Vogel, de Ruiter, Bouman, and de Vries Robbé, 2012) and the *SAPROF-Youth Version* (SAPROF-YV; de Vries Robbé, Geers, Stapel, Hilterman, and de Vogel, 2015; see also Chapter 10) are tools developed to assess protective factors for violence risk in adults and juveniles to provide for a more balanced assessment of violence risk and guide positive treatment interventions. These tools should always be used in addition to risk-focused risk assessment tools, such as the HCR-20/HCR-20^{V3} or the SAVRY. Research so far has demonstrated the SAPROF to be reliable, to have predictive power, and to be valuable for clinical practice (see for an overview de Vries Robbé, de Vogel, and Velhuizen, 2017). In a prospective study in a Dutch forensic psychiatric setting, it was found that the predictive validity of the SAPROF for abstention from violence during treatment was significant for both men and women. However, predictive accuracy was somewhat lower for women than for men and there were differences in which factors were the strongest predictors. For men, the items *self-control*, *work*, and *attitudes towards authority* were the best predictors for not committing violent incidents during treatment, whereas for women, the items *leisure activities*, *coping*, and *intelligence* were the strongest predicting factors (de Vries Robbé, de Vogel, Wever, Douglas, and Nijman, 2016). A study with outpatient male

and female juveniles and young adults demonstrated that overall the number of protective factors at discharge from treatment as measured by the SAPROF-YV and SAVRY was virtually equal between boys and girls (de Vries Robbé, Veldhuizen, Vullings, Helmers, and van Hoof, 2017). However, while boys scored higher on factors such as the individual resilience factor perseverance and factors related to the positive influence of parents, girls had higher ratings on the supportive influence of peers. Viljoen *et al.* (2016) also examined protective factors measured with different tools (HCR-20, SAPROF, START) in civil psychiatric patients and concluded that SPJ tools that utilise both risk and protective factors perform better. Gender was found to be a moderator in predicting severe aggression when using risk assessment tools. Both the SAPROF and the START strengths scores demonstrated superior predictive validity for men compared to women.

The Female Additional Manual (FAM)

The FAM was developed in response to the ambiguous research results with risk assessment tools for violence in female populations, the lack of available gender-specific tools, and a wish from mental health professionals working in forensic psychiatry for more knowledge of violence risks in women. As there is a considerable level of similarity in risk factors for men and women (Andrews *et al.*, 2012; Brennan *et al.*, 2012), it was decided not to develop a completely new risk assessment instrument for women, but instead to use the HCR-20 as a basis. The starting point was to formulate gender-sensitive additional guidelines and, subsequently, conduct studies of the psychometric properties and clinical value of this guideline.

The FAM was developed based on a literature review, interviews with mental health professionals, and a pilot study in a Dutch gender-mixed forensic psychiatric hospital. It was originally designed as an additional manual to the HCR-20 and in 2013 adapted for use with the HCR-20^{V3}. The FAM contains additional guidelines to two historical items of the HCR-20^{V3} (*personality disorder* and *traumatic experiences*) and eight new items with specific relevance to women (see Table 11.1). Furthermore, two new coding aspects were incorporated in the FAM also based on clinical experiences with other tools like the HCR-20, SAPROF, and

TABLE 11.1 HCR-20^{V3} and FAM ratings for Anne for the context of sheltered living

<i>Historical Scale (history of problems with . . .)</i>		<i>Presence</i>	<i>Relevance</i>
H1	Violence	Yes	Moderate
H2	Other antisocial behavior	Possible	Low
H3	Relationships	Yes	High
H4	Employment	Yes	Moderate
H5	Substance use	Yes	Moderate
H6	Major mental disorder	Yes	High
FAM H7	Personality disorder		High
	a. Antisocial, psychopathic, and dissocial	No	
	b. Other:		
	1. Cluster B (except antisocial)/traits of suspiciousness	Yes	
	2. Other	No	

(Continued)

TABLE 11.1 (Continued)

<i>Historical Scale (history of problems with . . .)</i>		<i>Presence</i>	<i>Relevance</i>
FAM H8	Traumatic experiences	Yes	High
	a. Victimisation/trauma:	Yes	
	1. During childhood	Yes	
	2. After childhood	Yes	
	b. Adverse childrearing experiences	Yes	
H9	Violent attitudes	No	Low
H10	Treatment or supervision response	Possible	High
FAM H11	Prostitution	No	Low
FAM H12	Parenting difficulties	Yes	High
FAM H13	Pregnancy at young age	No	Low
FAM H14	Suicidal behavior/self-harm	Yes	High
<i>Clinical Scale (recent problems with . . .)</i>		<i>Presence</i>	<i>Relevance</i>
C1	Insight	Possible	Moderate
C2	Violent ideation or intent	No	Low
C3	Symptoms of major mental disorder	Possible	High
C4	Instability	Yes	High
C5	Treatment or supervision response	Possible	Moderate
FAM C6	Covert/manipulative behaviour	Yes	High
FAM C7	Low self-esteem	Yes	Moderate
<i>Risk Management Scale (future problems with . . .)</i>		<i>Presence</i>	<i>Relevance</i>
R1	Professional services and plans	No	Low
R2	Living situation	Possible	Low
R3	Personal support	Yes	High
R4	Treatment or supervision response	Possible	High
R5	Stress/coping	Yes	High
FAM R6	Problematic child care responsibility	Yes	High
FAM R7	Problematic intimate relationship	Possible	High
<i>Structured Risk Ratings for next 12 months</i>			
HCR-20 ^{V3}	Risk for future violence/case prioritisation	Low to Moderate	
	Risk for serious physical harm	Low	
	Risk for imminent violence	Low	
FAM extra risk ratings	Self-destructive behaviour	Moderate to High	
	Victimisation	Moderate	
	Non-violent criminal behaviour	Low	

Note: No = not present; Possible/Partly = present to some extent; Yes = present. The sub-items of the HCR-20^{V3} were also coded but are not all shown in this table. The relevance was coded only for the overarching items and not for the sub-items. For more detailed information about the coding procedure of both tools, the reader is referred to the HCR-20^{V3} manual (Douglas *et al.*, 2013) and FAM manual (de Vogel, de Vries Robb, *et al.*, 2014).

START. First, the rater can make the final judgment on a 5-point scale instead of a 3-point scale. The reason to apply a 5-point scale instead of a 3-point scale is because it is easier to pinpoint nuances; in a forensic population where the treatment progress is usually slow, it can be useful and motivating to be able to show small changes. Second, the assessor is invited not only to make a final judgment on the risk of violent behaviour towards others (including influencing others to commit violence or being an accessory to violence) but also to judge the risk of three extra risk ratings: the risk for *self-destructive behaviour*, *victimisation*, and *non-violent criminal behaviour*. These three judgments should be seen as proposed as there is presently limited empirical evidence supporting the assumption that the risk factors in the FAM are related to these risks. However, the distinction between the different types of risks may be useful for clinical practice.

Preliminary research results with the FAM

In a Canadian sample of 62 male and 41 female civil psychiatric patients, it was found that the FAM showed good predictive validity for women for threatening behaviour and that certain FAM items showed better accuracy in women compared to the HCR-20 for threatening behaviour (Greig, 2014). In this study, no differences were found between the HCR-20 and FAM with respect to predictive accuracy for physical violent behaviour. Both tools showed low to moderate predictive validity. In a small sample of 28 female defendants adjudicated *not guilty by reason of insanity* in the US, good inter-rater reliability and predictive validity for inpatient violence for the FAM were found, although the results showed no incremental validity over the HCR-20^{V3} (Griswold, Green, Belfi, Grossi, Smith, and Otten, 2016). Preliminary prospective results in a group of 46 Dutch female forensic patients showed good inter-rater reliability and predictive validity of the FAM as an addition to the HCR-20 for both violence to others and self-harm (de Vogel, de Vries Robbé, *et al.*, 2014). In summary, so far only preliminary results from small samples are available regarding the psychometric properties of the FAM and no firm conclusions can be drawn. Much more research is needed into the FAM, as well as into other risk assessment tools in different female populations. Next to empirical results on psychometric properties, it is important to consider the clinical value of using the FAM as part of a violence risk assessment.

Clinical value of using the FAM in addition to the HCR-20^{V3}

Mental health professionals have reported considering the FAM a useful addition to the HCR-20/HCR-20^{V3}. Most importantly, they state that using the FAM is valuable for treatment planning and risk management (de Vogel, de Vries Robbé, *et al.*, 2014; Griswold *et al.*, 2016). In a small-scale study conducted regarding the clinical applicability of the FAM in the Dutch forensic psychiatric hospital where the FAM was developed, 23 mental health professionals with expertise in violence risk assessment were asked about their experiences with the tool (Louppen, 2015). Most participants reported believing that using the FAM as an addition to the HCR-20/HCR-20^{V3} resulted in an improved risk assessment (74%) and contributed to more gender-sensitive risk management (83%). More specifically, they stated that using the FAM reminded them of possible gender-sensitive issues and provided them with useful insights for risk management. They found the additional judgments especially valuable. Furthermore, participants considered the FAM a user-friendly tool and stated that it did not take

a lot of extra time (about 20 minutes) to code the tool alongside the HCR-20/HCR-20^{v3}. To illustrate the value of using the FAM in daily clinical practice, a case example of a Dutch forensic psychiatric patient is presented next.

Case example

Anne grew up as the second of four children. Her father was a dominant man who frequently acted violently towards his wife and children. Anne's mother suffered from severe depression and was not capable of protecting her children from their violent father. Anne was a very timid and insecure girl with low self-esteem. Anne appeared to be very obedient; however, she also behaved in a covert way and tended to go her own way. Anne was sexually abused by a teacher when she was 17 years old, but did not tell anyone. After this happened, Anne started to harm herself by cutting her arms when she felt stressed or unhappy. At the age of 20, Anne got married to a man who was dominant and violent, just like her father. They had three children. Her husband strongly believed it was the task of women to raise children. He was hardly involved in family life and often away from home. Anne found it hard to take care of her children and felt depressed. Anne finished pharmacy education and started working in a pharmacy. She worked very hard, but had many difficulties in collaboration with her colleagues. Her colleagues felt Anne was extremely rigid and held unrealistic expectations of herself and others. During arguments, Anne sometimes fainted, and one time she hit a colleague on the head. She started to use tranquillizers, which she stole from the pharmacy. One day, her employer caught her stealing medication. He was angry, but also worried about Anne and he tried to persuade her to seek help for her psychological problems. She lied to him that she was admitted to a treatment programme, while in fact she never applied. The stress at work, relational problems with her husband, and the burden of taking care of her children became too much for Anne. She felt like a failure as a mother and became more and more depressed. Finally, one day Anne decided to end her life. As she was convinced that her husband was not able to take care of the children, she felt they would also be 'better off' if they were dead. Anne gave her children tranquillizers and jumped into a canal with them. Bystanders were able to save Anne and her children, although the youngest child was severely injured.

Anne was sentenced to two years' imprisonment and mandatory forensic psychiatric treatment. She was diagnosed with a borderline personality disorder and major depression with psychotic features. When she was admitted to the forensic psychiatric hospital, she was seen as a friendly, cooperative woman, but also very timid and withdrawn. Although seemingly cooperative, she turned out not to be reliable with respect to her finances and medication. It was observed that Anne often lied and showed manipulative behaviour. For example, she played staff members against each other and forged their signatures at the workplace to obtain extra money. In the first year of treatment, Anne was frequently involved in disruptive incidents that took place in her social environment. However, her role in these incidents was often unclear. She

had many difficulties in relation to other patients. Several times she claimed that she had been sexually abused by male patients, but no evidence of this was found. Often, she had psychosomatic complaints, she harmed herself, and twice she committed a serious suicide attempt.

After this first year, Anne's psychiatric condition stabilised and gradually she gained more insight into her behaviour. She learned to accept and appreciate the help of her treatment team and started to realise that if she wanted to take care of her children again, she had to make major changes in her life. Anne desperately wanted to prove that she could be a good mother. Her wish to be a good mother was seen as a life goal (protective factor), but also as a risk factor, because she was not really capable of taking care of them due to her limited coping skills. She worried a lot about her children, but was able to seek help and support from her treatment team. Anne complied with agreements also in times when she felt depressed. After five years of inpatient treatment, Anne was ready to start with the resocialisation phase, in which she lived outside of the hospital, but was still supervised very closely by her treatment team. She found a job in a clothing store. Living on her own seemed to be easier for her than in a living-group in the hospital. Anne frequently visited her children, although the contact with her ex-husband remained difficult and caused her a lot of stress.

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Risk assessment of Anne

Every year, a structured risk assessment is conducted for all patients in this forensic psychiatric hospital. The context for the risk assessment of Anne was prolongation of mandatory treatment in a sheltered living situation with intensive supervision and guarantee of readmission to the hospital in case of relapse. The HCR-20^{V3}, FAM, and SAPROF were coded independently by three evaluators from different disciplines. During a case conference, the individual ratings were discussed to reach consensus (see for more information de Vogel, van den Broek, and de Vries Robbé, 2014). Table 11.1 presents the consensus prevalence and relevance ratings for the HCR-20^{V3} and FAM for Anne. The most relevant HCR-20^{V3} risk factors for Anne were personality disorder, instability, and stress/coping. Coding of the FAM yielded insight into several other risk factors that were deemed important for Anne, particularly covert/manipulative behaviour, low self-esteem, and problematic child care responsibility.

The SAPROF was coded in addition to the HCR-20^{V3}/FAM to gain insight into Anne's protective factors (see Table 11.2). The most important protective factors (key factors) for Anne were medication, professional care, and external control. Since most of the present protective factors were external, it was deemed important for Anne to develop more internal and motivational factors. More specifically, the items coping, self-control, work, and network were seen as goal factors. It was recommended that treatment in the following year should focus on further developing these protective factors.

Overall, it was concluded that Anne posed a low to moderate risk for engaging in physically violent behaviour towards others in the coming year given the high intensity of professional care. It was judged that the risk for self-destructive behaviour was high – more specifically, risk of suicidal behaviour and possible misuse of medication. The risk of victimisation was

TABLE 11.2 SAPROF ratings for Anne for the context of sheltered living

<i>Internal items</i>		<i>Code</i>	<i>Key</i>	<i>Goal</i>
1	Intelligence	0	<input type="checkbox"/>	
2	Secure attachment in childhood	0	<input type="checkbox"/>	
3	Empathy	1	<input type="checkbox"/>	<input type="checkbox"/>
4	Coping	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Self-control	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Motivational items</i>		<i>Code</i>		
6	Work	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Leisure activities	0	<input type="checkbox"/>	<input type="checkbox"/>
8	Financial management	1	<input type="checkbox"/>	<input type="checkbox"/>
9	Motivation for treatment	1	<input type="checkbox"/>	<input type="checkbox"/>
10	Attitudes towards authority	2	<input type="checkbox"/>	<input type="checkbox"/>
11	Life goals	1	<input type="checkbox"/>	<input type="checkbox"/>
12	Medication	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>External items</i>		<i>Code</i>		
13	Network	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14	Intimate relationship	0	<input type="checkbox"/>	<input type="checkbox"/>
15	Professional care	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16	Living circumstances	2	<input type="checkbox"/>	<input type="checkbox"/>
17	External control	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Final judgment protective factors

Moderate to high protection

Note: 0 = not present; 1 = present to some extent; 2 = present. Key factor: item is considered essential for the prevention of violent behaviour. Goal factor: item is considered important as a treatment goal as improvement on this item may have a protective effect. For more detailed information about the coding procedure, the reader is referred to the SAPROF manual (de Vogel *et al.*, 2012).

judged as moderate. Her ex-husband was seen as a possible threat to Anne. Furthermore, the risk for non-violent criminal behaviour was seen as low. In the hypothetical situation that the mandatory treatment would be terminated by court (ratings for this context are not shown in Tables 11.1 and 11.2), it was expected that all types of risks would be high for Anne, except from non-violent criminal behaviour, which would still be seen as low. It was expected that without any form of treatment or supervision, Anne would have insufficient coping, lose her self-control, and could become depressed and suicidal, with the possible risk of taking her children with her again or possibly acting violently towards her ex-partner as revenge.

Overall, the additional value of the FAM can be found in the increased attention for risks other than violence to others, especially Anne's elevated risk for self-destructive behaviour. Several of the FAM items seem to offer additional opportunities for risk management strategies for Anne – for example, managing the risk of suicidality, closely monitoring the relationship with her children and ex-husband, working on improving her low self-esteem, and being aware of manipulative skills, like playing treatment staff members against one another. Treatment staff mentioned that coding the FAM rendered acknowledgement for female-specific problems and yielded better understanding and insight into Anne's behaviour. They stated that

coding the FAM made it easier to explain the results of the risk assessment to Anne and link them to risk management strategies.

Conclusion

The current chapter has demonstrated the importance of acknowledging gender differences in the forensic field and adequately conducting gender-sensitive risk assessments. Although advances have been made in the past ten years, there remain substantial gaps in knowledge and debate regarding gender differences and more theoretical and empirical research is necessary. We advise mental health professionals working with women to use the FAM *in addition* to commonly used risk assessment tools, like the HCR-20/HCR-20^{V3}. The FAM is the first tool that was developed specifically to assess risk for violence in adult female forensic psychiatric patients that is applicable with commonly used tools already in existence to assess both gender-neutral factors and gender-responsive factors. The FAM is possibly also useful for women in prison or in general psychiatry who have demonstrated violence to others. The tool is seen as user-friendly and clinically relevant.

Still, an important limitation of the FAM is that there is relatively little empirical evidence for the new risk factors and additional HCR-20^{V3} item guidelines for women. For some of the factors there is clear empirical support with respect to the relation with general criminal offending, but not specifically for the relation with violence. Furthermore, for a number of items a correlation was found with violent behaviour in the past, but this does not necessarily mean that the factor is also related to future violent behaviour. It is also still unknown whether the items actually have empirical value for the prediction of the extra risk ratings of self-destructive behaviour, victimisation, and non-violent criminal behaviour. Future research in various settings will have to examine whether the items and risk judgments in the FAM actually predict repeated violence to others. In addition, future research regarding female offending should take into account possible female-specific protective factors, an area of research that at present is still largely unexplored. It should be noted that research on violence by women and predicting such behaviour is challenging because of small sample sizes, relatively high rates of chronic psychiatric admission, and high mortality rates, and consequently requires a longer period of time as well as good collaboration between institutions (see also Burman, Batchelor, and Brown, 2001).

Next to the recommendation to use the FAM as a gender-sensitive additional tool for violence risk assessment, we would advise scholars to consider developing or adapting tools for assessing risk of child abuse or intimate partner violence, risks in adolescent girls, or psychopathy in female populations, as most of these tools were developed and validated in predominantly male populations. In general, for clinical practice, we would advise mental health professionals to use the SPJ method, because it seems to be one of the most effective methods for both men and women (Garcia-Mansilla *et al.*, 2009). It is important to consider not only risk of violence in society but also inpatient violence and to attend to protective factors.

Finally, gender-sensitive risk assessment should lead to specific, gender-sensitive risk management and treatment. In the past decade, attention to gender-responsive treatment interventions has grown (see, e.g., Bartlett, Jhanjib, Whitec, and Harty, 2014; Kubiak, Kim, Fedock, and Bybee, 2015; Long, Fulton, and Hollin, 2008). Generally, gender-responsive interventions should address criminogenic needs, include gender-responsive programmes, and be trauma-informed (de Vogel and Nicholls, 2016). Prevention of (violent) offending is crucial also for

the next generations. We know that children of violent or antisocial mothers are at serious risk of experiencing hindered development; they have elevated risks of problems relating to mental and physical health, substance use, school, and offending behaviour (Felitti *et al.*, 1998; Kim *et al.*, 2009). Overall, the ultimate goal would be to prevent repeated violent behaviour in women and break the cycle of violence. Gaining more knowledge of gender-specific risk and protective factors, applying adequate gender-sensitive risk assessment, and providing gender-responsive treatment programmes are essential steps to reach this goal.

Note

- 1 It should be noted that in several European countries – for instance, Scotland, England, and Sweden – a cut-off score of 25 or 26 has proven more useful than the official cut-off score of 30 (Hare, Clark, Grann, and Thornton, 2000).

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