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# **RETURNING TO SOCIETY:**

## DAILY-LIFE STRESSORS IN THE IMMEDIATE PRISON RELEASE PHASE

LAURA WAHLHUETTER

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This paper is the third part of an ongoing research project by Andersson et al. 2014 using Interactive Voice Response, an innovative automatic telephone assessment to study Swedish paroled offenders in the first 30 days after prison. Repeated measures of qualitative reports on daily most stressful events (stressors) and quantitative severity ratings (stress) were used to study the perception of stress in the immediate prison release phase. Adding to the knowledge about prisoners' reentry by exploring paroled offenders' perception on daily stressful events and the stress intensity associated with these was the main purpose of this essay. Following a phenomenological approach, daily stressful events could be categorized into social, psychological and physical stressors and an insight in the everyday complexities through the reports of paroled offenders could be provided. While social stressors build the largest category, physical stressors are on average perceived as most severe. Overall stress severity shows an increase over the duration of the study period. The findings further support the feasibility of daily automated telephone assessments in the context of the Swedish Prison and Probation Service.

*Keywords:* immediate prison release, Interactive Voice Response, paroled offenders, stress & stressors, transition phase

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# INTRODUCTION

Subject of this paper is the transition from prison to society commonly referred to as “prisoner reentry” (Gideon 2009; Visher & Travis 2003; Western et al. 2015). Worldwide prison populations are reaching new peaks and the majority of these individuals will eventually be released again (Gideon 2009; Phillips & Lindsay 2011; Seiter & Kadela 2003; Travis & Petersilia 2001). Literature also suggests that paroled offenders’ experiences in the immediate prison release phase can impact the outcomes of the reintegration process (Zamble & Quinsey 1997). Given the rising number of individuals that are released from prison every year that are therefore going through this transition phase, it is not surprising that this topic has become an important concern of criminological research and the criminal justice system in particular (Phillips & Lindsay 2011; Travis 2005; Visher & Travis 2003; Western et al. 2015). One topic that is still understudied in this regard is that prison releasees often face discrimination and difficulties in various areas of everyday life (Gideon 2009; Visher & Travis 2003; Western et al. 2015). In their study on “Stress and Hardship after Prison” Western and colleagues (2015) from Harvard University state that it is crucial for future criminological research to understand prison release as disruptive event that can cause stress (ibid: 1540).

The study at hand is the third part of an ongoing research project (Andersson et al. 2014; Vasiljevic et al. 2017) that addresses this issue. An innovative telephone technique called Interactive voice response (IVR) or automated telephony was used to study the transition from prison in a Swedish population of general paroled offenders. All three parts of this research project used data collected through IVR. In this data collection process automated telephone calls were used to assess and intervene on dynamic acute risk factors and stress-related variables in paroled offenders (e.g. substance abuse) in their first 30 days after prison. This was done at baseline, while participants were still in prison and on 30 consecutive days following prison release. The overall purpose of the original study was to find out if this automated telephone technique is a promising method to overcome limitations identified in previous research and to gain a better understanding of paroled offenders’ transition from prison to society.

The first study of this research project consists of an evaluation on whether the well-established automated telephone technique is an appropriate tool to monitor acute dynamic risk factors within the setting of Prison and Probation Services in Sweden. Furthermore, the effects of brief cognitive interventions were investigated. In regard to a trend that was defined by the summary scores of the daily assessments as either positive, negative or no change (Andersson et al. 2014). In the first part of this research project results showed, that daily automated telephone assessments proved to be useful to follow up and give interventions in paroled offenders.

In the second publication just recently released, Vasiljevic and colleagues (2017) were able to further confirm the feasibility of the Interactive Voice Response as useful research method for the Swedish Prison and Probation Service. Additionally, stress was defined as acute dynamic risk factors that can affect the time after prison release. Dynamic factors unlike static ones can rapidly change

within short amounts of time (Vasiljevic et al. 2017: 2). The main focus of this publication was to see if one-month daily changes in these acute dynamic risk factors show a predictive ability for one-year recidivism in crime. Furthermore, this publication investigated if the daily assessments in connection with a brief cognitive intervention help to reduce recidivism in paroled offenders. While no differences between the control and intervention group in regards to one-year recidivism could be established, findings show that changes in five risk-factors could be linked to a return in criminal behavior (Vasiljevic et al. 2017).

This essay is the third part of the research project. This time a focus is put on the Daily Assessment of Daily Experience (Stone & Neal: 1982) with a focus on stress and more specifically daily stressors in the immediate prison release phase. While the other two publications did take a first look at the severity ratings, this paper will now do this more closely and in connection to the daily most stressful events paroled offenders reported. Therefore the last two measures obtained through IVR in the initial research project were used. They consisted of both a qualitative open-ended question on the most stressful daily event (stressors) and a quantitative severity rating (stress)<sup>1</sup> of the reported stressor experienced in the time after prison release. The overall aim in this research paper is to shed light on the transition from prison to society with a focus on what it is that paroled offenders report as daily stressful events and with what intensity stress is experienced. In order to get a better understanding of stressors and stress identified in the course of the one-month daily data collection process, a theoretical approach towards prison reentry and the concept of stress will be provided.

## **1. THEORETICAL APPROACH**

### **Reentry: A Transition phase from Prison to Society**

“Moving from a prison, an institution of total control, to the often chaotic environment of modern life is a powerful transition poorly understood by the research community, yet vividly portrayed in the writings of former prisoners” (Visher & Travis 2003: 107)

In a general understanding, a transition can be best defined as a process of change in the life course of an individual. It brings along opportunities and challenges and often demands a personal readjustment. Whether a transition phase is initially welcomed, occurs unplanned or is forced by life events, it usually has the potential to be in one way or another stressful for the affected individual but also offers the opportunity for personal growth and development (Walker & Crawford 2014: 128).

Given different prison settings, criminal justice policies and conditions of probation, the point of departure might differ for paroled offenders. However, one thing in common seems to be that returning from prison back to a free society is never easy. Taking the perspective of a former inmate, “waking up outside the

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<sup>1</sup> In the following stressful events and stressors as well as severity ratings and stress will be used synonymously

walls” might according to Gideon (2009) even feel like arriving in a strange place or foreign country (Gideon 2009: 44). The process of leaving prison and returning to everyday life is also known as prisoners’ reentry phase and describes a transition process. It is one that is not unplanned but also not entirely controllable for the individual affected by it. It often presents itself in form of a process of social integration and for many feels like a rocky road full of challenges and difficulties. Finding a way back into a community and/or home, according to Visher & Travis (2003) is an individual pathway. It varies along the lines of social inequality and is strongly affected by the post prison adjustment and actual possibilities of reintegration (Visher & Travis 2003: 97; Western et al. 2015: 1517).

Certain milestones of this transition phase could already be identified in previous literature and include finding a place to stay, secured employment and income, stable relationships and social support, settling into a community or neighborhood and in many cases sobriety as well as staying away from old criminal peers, to only name a few important issues (Visher & Travis 2003: 97; 107; Western et al. 2015: 1515).

A struggle to obtain this basic level of material and social well-being can be perceived as stressful experience by the individual and it makes becoming a member of the community more difficult (Visher & Travis 2003: 97). This can also be related to Agnew’s (2001) General strain theory. Strains - often also referred to as stressors - are understood as events or conditions that are perceived as unpleasant (Agnew 2001: 320f). According to Agnew (1992) conditions experienced as strain usually involve goal blockage, loss of positive stimuli and / or the reinforcement of negative stimuli (ibid: 323). While some of these stressors seem to be generally disliked, there might as well be group differences in how these events and conditions are perceived e.g. gender differences, SES or other factors, which need to be considered (ibid: 321). Former prisoners for example can be viewed as a particular population within society that is facing various stressors and strains after prison release. They often find themselves at the fringe of society with little access to community participation. The stigma of having been in prison often becomes apparent in areas of everyday life e.g. the job market or economical problems (Western et al. 2015: 1517). But also daily routines that come for example with jobs and stable social bonds are something prison releasees need to relearn (Visher & Travis 2003: 97). Moreover, being marginalized often complicates the achievement of the above mentioned reentry milestones as well as mitigating the risks for criminal recidivism. Not yet belonging to the mainstream society when at the same time trying to avoid former lifestyles and daily hassles - that might have led to incarceration in the first place - often poses various stressors<sup>2</sup> on the paroled offender (Biswanger et al. 2012: 5; Calcaterra et al. 2014; 41ff; Western et al 2015: 1515).

A majority of previous research on probation and the immediate prison release phase show a strong focus on substance use and the reintegration processes in association with social stressors<sup>3</sup>. The research states that a lack of a stable social network, housing, limited economic resources and therefore basic social well-being can contribute to a relapse into substance misuse in the immediate prison

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<sup>2</sup> This term will be explained in more detail in Chapter “ The Concept of Stress”.

<sup>3</sup> The concept and definition of social stressors will be elaborated in more detail in “Stressors”

release phase (Biswanger et al. 2012; Calcaterra et al. 2014; Gideon 2009). Others focus on how individuals released from prison use coping strategies during the reentry process and how this might have implications on desistance or recidivism (Gullone et al. 2000; Phillips & Lindsay 2011; Shapland et al. 2016; Zamble & Poporino 1984). In their study on coping with reentry Phillip and Lindsay (2011) define avoidance of managing problems and emotions as the predominant coping strategy released prisoners participating in their study used to deal with stressors during the transition from prison to society. According to their findings, this included a pattern of an initially optimistic feeling about prison release that was followed by an emotional shift due to practical problems, every day struggles or other obstacles. This shift led to a feeling of being overwhelmed. Even though tries to cope in healthy manners were apparent among the participating prison releasees, they ended up relapsing into substance abuse which not only increased the stressors and problems in general but in case of the 20 participants led to recidivism as well (Phillips & Lindsay 2008: 150). Similar findings were also made in another study by Hanrahan and colleagues (2005). Additionally, a range of studies do link relapse into substance use in the reentry phase to a higher risk of criminal recidivism (Biswanger et al 2012; Buikhuisen & Hoekstra 1974; Gideon 2009; Lipton 1995; Martin et al. 1999). These studies however also found, that a supportive network in any form is found to be crucial to maintain sobriety in the immediate prison release phase and could therefore reduce the risk of returning to criminal activity (Biswanger et al 2012; Buikhuisen & Hoekstra 1974; Gideon 2009; Lipton 1995; Martin et al. 1999). This in a way also underlines Hirschi's (2002) social control theory which suggests that weak or broken social bonds and ties to society at large as well as to family and friends may contribute to delinquent and criminal behavior (Hirschi 2002: 16). According to Hirschi, these social bonds consist of four elements - attachment, commitment, involvement and belief - which even though related also emerge as separate factors. After prison release and in the vulnerable time of the transition back into society it is often the case that social support networks are not in place or weak and broken, prison releasees therefore might feel left alone, frustrated and socially excluded from the mainstream society. Especially obstacles to achieve involvement in form of being able to participate in conventional activities like work or finding ways to connect with new peers is according to Hirschi's theory correlated with the risk of criminal recidivism and maladaptive coping strategies (Hirschi 2002: 22).

According to Gideon (2009) there is also a need for more research regarding after-release-supervision and monitoring from the perspective of the paroled offenders. Visher (2004) states that a large number of prison releasees actually return to prison not because of new committed crimes but because they violate their probation and release conditions (Visher 2004: 164). In addition findings in Gideon's (2009) qualitative research suggest that formal social control and support mechanisms are crucial for the outcome of the prison reentry phase but need the input of those dependent on them (Gideon 2009: 47; 53).

Implied through the quote in the beginning of this chapter, prisoners are often released without the proper tools to avoid or cope with different types of stressful events. At the same time they find themselves returning to an environment that presents a wide range of obstacles. An environment that, compared to the heavily controlled prison setting, presents itself as unstructured, lacks definite rules, requires self-organization and accountability for ones daily routines, hence, quite the opposite to the monotony of prison (Biswanger et al. 2012: 1; Gideon 2009:

45; Visher & Travis 2003: 107). Previous literature and research suggests that there is a broad variety of demands that might pose a lot of stress on individuals reentering society (Gideon 2009; Phillips & Lindsay 2011; Western et al 2015). Stress, might even be reinforced within the immediate prison release phase (Gideon 2009: 44; Western et al. 2015: 1537f.), and yet Visher and Travis (2003) confirm in their literature and research review that little is known about prison releasees' needs and how they perceive the first weeks and months after prison (ibid: 96). Additionally, only a few studies so far addressed acute dynamic risk-factors like stress in the immediate prison release phase. These however, are regarded as subject to change. Deeper knowledge in this field therefore could improve treatment plans for inmates and paroled offenders (Vasiljevic et al. 2017: 2; also see Hansson & Harris 2000).

Due to difficulties reaching and more importantly staying in touch with this population makes studying prison releasees usually not an easy task (Western et al. 2015: 1514). This can be linked to the fact that individuals released from prison tend to lack stable housing, are often weakly attached to a community or move frequently. Considering the special life circumstances of paroled offenders, studies using a follow-up design often face attrition and no responses (Western et al. 2015: 1519). Visher and Travis (2003) however conclude that in order to understand the longtime-course of individuals in the transition from prison to society we need repeated information over the course of weeks, months and maybe even years to understand these issues better (96). Finding methodological solutions like the automated telephone technique IVR used in the initial research project to overcome this issue could pave the way to a better understanding of the prisoners' reentry (Andersson et al. 2014: 5; Vasiljevic et al. 2017: 3; Western et al. 2015: 1519).

### **The Concept of Stress**

When conducting research about stress one has to find its way through a variety of different approaches and definitions. Due to a lack of agreement on what is really meant when we talk about stress a wider approach has to be taken into account. According to Morse (1995) it could best be described as one of the "most confused concepts ever evaluated by the scientific community" (ibid: 5). One difficulty identified in connection to stress related research has been that the concept is often used as unitary variable, disregarding that stress condenses a set of interdependent processes including individual perception and coping strategies (DeLongis et al 1988: 486).

#### *What is Stress?*

Among other authors, Morse (1998) suggests using a process-oriented definition of stress. In this understanding, stress is an unspecific reaction, triggered by a demand or threat. Stress according to Morse can never be a term for a single entity but instead consists of different pieces: stressors; stress response as well as perception of stress severity and needs to be considered a unique experience for every individual (ibid: 109; Morse 1995: 6; 16). This definition of stress has also briefly been outlined in a previous publication of the initial research project (Andersson et al. 2014: 2).

Besides the comprehensive body of literature about stress, an extensive and multi-faceted variety of studies exists. It ranges from assessing stress prevalence in various ways and settings (Almeida et al. 2002; Eckenrode 1986; Folkman et al.



1986), to categorizing stressors into broad and specific categories (Almeida et al. 2002; Morse 1998; Morse 1995; Pow et al. 2016) as well as to investigating different forms of stress responses, stress appraisal and coping strategies (Folkman et al. 1986; Phillips & Lindsay 2011). Almeida and colleagues (2005) conclude that improvements in study design and the data collection process allow researchers to address a range of different topics related to stress: First, the identification of different types of stressors and their impact on an individual's well-being. Secondly and more closely linked to daily-stress processes, the question how sociodemographic factors and individual characteristic may account for differences in daily stress prevalence and perception became an important issue in stress research. To understand the individual daily-stress process it thus requires both objective characteristics, meaning type of stressor(s), frequency, focus of involvement, and subjective appraisal, focusing on perceived stress severity and how disruptive or threatening a daily stressor is experienced (Almeida 2005: 64f.).

Since daily stress, different types of stressors and stress appraisal are in the focus of this essay, the components considered to define stress in this paper will be elaborated more closely.

### *Stressors*

*Stressors* in this context can be viewed as the cause or trigger of stress (Morse 1998: 109). In line with literature challenges can affect the individual on different levels: *psychological, physical; social* or *external* and *internal*, to only name a few. Manifold categorizations and classifications are present in previous research (Almeida et al 2002; Charles et al. 2013; Morse 1995; Pow et al. 2016; Serido et al. 2004). Moreover, they can occur in different forms and frequencies. If a stressor lasts only for a short time and arises once, it is referred to as an acute stressor, unlike chronic stressors that repeatedly put a demand or threat on the individual over a long period of time (Eckenrode 1984: 907f.; Morse 1995: 7; see also Vingerhoets 1985).

Daily hassles or stressors, which are in focus in this paper, present yet another manifestation of stress. According to Almeida (2005), "daily stressors are defined as routine challenges of day-to-day living" (64) and consequently can be understood as events disrupting daily life, such as arguments with family and friends, everyday concerns of work, commuting, public transportations the weather or anything else that might interrupt an individual's routines. Major life stressors in comparison present a form of crisis or life changing event, for example the death of a loved one, a job loss or divorce. Despite often being perceived as more severe they usually do not happen on a daily basis. Daily hassles on the contrary can pose a more constant effect on the individual's well-being. These minor daily stressors - besides having immediate effects when being acute - have a tendency to easily pile up and evoke feelings of overload, irritations and frustration when becoming chronic (Almeida 2005: 64; see also Lazarus 1999; Zautra 2003).

For the purpose of this paper the categorization of stressors followed a definition by Morse (1995). He suggests three types of stressors: *social, psychological* and *physical*. Based on literature there are inherent characteristics connected to each of these three specific types that help differentiate them from each other. *Social Stressors* according to Morse (1995) result from interaction of an individual with

its environment and surrounding. This type of stressor, besides often appearing unplanned, also includes day-to-day stressful events and challenges that can put a frequent demand on the individual. *Psychological Stressors* on the other hand tend to be self-induced and often consist of negative emotions. However, this category can also be caused by physical or social stressors. *Physical stressors* should be viewed as external or environmental agents or demands. According to the author, this type could be avoided. He does unfortunately not specify how one could stay clear of this type of stressor. We therefore can only assume what avoiding this stressor type could look like, e.g. to stay inside or put on warm clothes when temperatures are cold; to not use public transportation during rush hour. However, given the fact that stressors like this are brought on by external force, due to certain life circumstances and often without an interaction (the need of public transportation because one does not own a car or being homeless and therefore unable to escape adverse weather conditions), it might not always be as simple to stay clear of these factors (ibid: 7). According to Morse (1995), any of these three broad types of stressors have to be considered interrelated as they either occur solely or in combination with each other (ibid: 6).

### *Perception of Stress*

Stress response can best be described as the reaction that occurs in connection to a stressful event, which can either be physiological or psychological. Stressors to different degrees cause physiological reactions, which are often referred to as a “fight or flight” response. This reaction of the autonomic nervous system is a natural defense mechanism that either helps us to fight in a situation where we feel threatened or escape to safety. These bodily reactions however, do not necessarily need to be caused by a life-threatening event, but can also occur as an overreaction to a demand that presents itself in everyday life (Morse 1995: 5; Harvard Health Publications 2011; see also Selye 1936). Further it not only varies between but also within individuals and depends on whether it is an expected or unexpected stressful incident. Naturally also the type of stressor e.g. is it acute or long-term stress, external or internal and the person’s overall mood and perception of control, influences the response in any demanding situation (Morse 1998: 110)

Another important component of the perception of stress therefore is the individual make-up. It addresses an individual’s response to stressors. This means that even though a stressor might be present, if it is not perceived as such no stress occurs. The individual make-up can therefore vary tremendously from individual to individual and tends to be based on interpersonal and environmental factors (Morse 1998: 109f).

In connection to that, *appraisal* is an important part of stress theory and for the purpose of this paper. It allows us to look more closely at the perceived severity or intensity of stress. Even though environmental stressors and systematic challenges might generally produce stress in a majority of people, group and individual differences in the way we experience these stressors are evident. This means that e.g. depending on social status, vulnerability and the overall life-situation the interpretation, reaction, perception and therefore handling of a stressful event might differ (Lazarus & Folkman 1984: 22). It then comes with little surprise that according to past research the time after prison release is usually characterized by high levels of stress (Bereswill 2004: 320; Vasiljevic et al. 2017: 1).

### *Studying Stress*

When comparing research over different decades it becomes apparent that similar study designs have been applied. The majority of research related to stress has been conducted as longitudinal or follow-up studies. A very common methodology used in this context is the daily diary method. It consists of reports in form of written or spoken statements or the answering of questionnaires on a regular basis (Almeida et al 2002; Eckenrode 1984; Pow et al. 2016). While older studies on stress using this approach mainly relied on paper and pen surveys (Eckenrode 1984), questionnaires and on few occasions in person follow-up interviews (Folkman et al. 1986) to collect data, more recent studies shifted towards more technologically advanced methods. Over the last few years researchers started using daily telephone calls as well as electronic diary methods to answer important questions related to stress (Almeida et al 2002; Almeida 2005; Andersson et al. 2014; Pow et al. 2016).

This innovative data collection process comes with a set of advantages when compared to the old fashion paper and pen version. The latter has undergone a lot of critique as participants commonly tend not to complete diary entries on scheduled times or incomplete. Eventually, this method proved to be much more difficult for the research to control (Almeida 2005: 66). The former on the other hand is organized so that study participants can respond over the telephone or electronically via web pages and it therefore offers more control over the participant's compliance. When used to better understand the concept of daily stressors, diary methods used over the course of several days collecting repeated measurements from individuals allow the researcher to gain insight on stressors in form of daily snapshots (ibid: 64; 66). One of these advanced telephone techniques is Interactive Voice Response (IVR) used in the initial data collection process of this research project (see Andersson et al. 2014; Vasiljevic et al. 2017). This method helps to improve response rates, reduce memory and recall bias at the same time as it offers the possibility for assessment of within-person processes in a longitudinal setting (Vasiljevic et al. 2017: 3). Furthermore, these types of studies often use a mixed method approach by using qualitative and quantitative methods in both the data collection process and data analysis (e.g. Almeida et al. 2002; Phillips & Lindsay 2011; Pow et al. 2016).

## 2. AIM AND OBJECTIVE

Two issues need to be acknowledged when we look at previous research on stress and prisoners' reentry. First, numerous projects in the field of stress research focus on aspects of daily stressors, however, the majority does so for general populations and in a national setting, disregarding that different social groups might be facing different rates of daily stressors and challenges or perceive them to another extent (Almeida et al 2002: 42; Almeida 2005: 65). Second, while a large body of research on the transition from prison to society exists, most of it focuses either on reentry failure (recidivism), its success (desistance) or prison release and relapse into substance abuse (Biswanger et al. 2012; Calcaterra 2014; Gideon 2009; Phillips & Lindsay 2011). So far only a few studies address the underlying complexities that prison release often involves. We are therefore left with very little knowledge about the everyday stressful events of prison releasees and how severe participants experience stress during this transition.

This paper aims to overcome these limitations. First of all, by choosing the population of paroled offenders within the Swedish Probation and Prison Setting, we can get a better insight on what it is that causes the stress in the transition from prison to society. Second, and as has been emphasized before, the study at hand uses Interactive Voice Response, a technologically advanced telephone technique. This method made it possible to repeatedly assess qualitative stressful events (stressors) and quantitative ratings (stress) on a daily basis over the course of 30 days after prison release (immediate prison release phase) and on one day prior to release (pre-assessment/baseline). Nowadays, possession and daily utilization of mobile phones is very common in most countries including Sweden, as well as in all kind of groups within society (Almeida et al. 2002: 42; Andersson et al. 2014: 3; also see Stone et al 1991). Therefore assessing stressors and stress by using automated telephone calls on a daily basis has the potential to offer a new framework to study stress among prison releasees. In a Swedish sample of paroled offenders this not only presents itself as innovative approach but also could be seen as a chance to overcome the difficulty of staying in touch with a population that is often considered to be elusive within the field of criminology (Western et al. 2015: 1540).

To the best of the author's knowledge, this study by Andersson et al. 2014 is the first one to use this method to identify daily most stressful events in combination with severity ratings in the specific context of the immediate prison release phase.

The aim of this paper is to explore every-day stressors paroled offenders experience during the first 30 days after prison release. As stressors can also be viewed as needs, pinpointing these daily stressors within this transition phase can be crucial for the Probation and Prison Service to help facilitate a smooth reintegration. The following research questions will be answered to explore different types of stressors and the perceived stress severity paroled offenders reported in daily assessments.

- What examples of daily stressful events were reported by Swedish paroled offenders? How many social, psychological and physical stressors were reported over the course of the study period?

- How many severity ratings in connection to daily stressful events were reported over the study period?
- What is the average stress severity experienced by Swedish paroled offenders in the first 30 days after prison and does it change over the duration of the study?

### **3. METHOD**

Most parts in connection with the study design have for the purpose of previous publications been well established. For a detailed description of the methodology used in the initial research project see Andersson et al. 2014. In the following only an overview of the initial setting, recruitment, participants and all adjustments made for the purpose of the study at hand will be presented in short.

#### **Setting: Swedish Prison and Probation Service**

The data collection took place in Sweden, where offenders after sentences of a minimum of one month imprisonment are released on parole. The Swedish Prison and Probation Services consist of six geographical regions. The individuals participating in this study came from all nine prisons located in the Southern region and four out of six in the Eastern region. Prison and Probation officers operate independently. After release, participants were assigned a probation officer depending on the area the individual lives in. A total of 30 probation offices out of 34 in Sweden were involved in the study including 93 probation officers (Andersson et al 2014: 4f.).

#### *Recruitment*

Participants were recruited from the Swedish Prison and Probation Service between December 2009 and August 2010. This process took place while individuals were still in prison. Characteristics used to identify eligible participants were being a paroled offender having served either a short or extended sentence but most importantly leaving prison on probation and therefore being assigned a probation officer. Furthermore, participants needed to be sufficiently fluent in Swedish and able to register their telephone with the project's central computer no later than the day of parole. Participants needed to fulfill all of the above mentioned conditions of participation. The answers to the open-ended questions were given in Swedish and for the purpose of this study later translated into English.

Initially the study was a randomized trial and individuals were allocated into two different groups: an intervention and a control group (Andersson et al. 2014: 4f; 8). The assessments made within both groups were the same with the only distinction being that in the intervention group participants additionally received daily feedback and recommendations. Another group difference was that the responsible parole officer was informed via e-mail about the progress of their parolee (ibid: 5f.). Given that all the questions and in particular the question of the daily most stressful event and its severity rating have been the same for all paroled offenders, the division of individuals into the intervention and control group has been disregarded for the purpose of this study. It is however important to point out

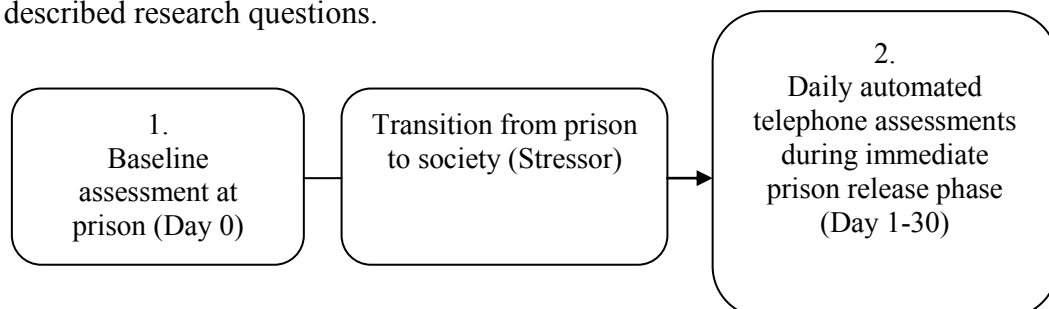
the importance of the randomization that is inherent in the initial research project. The previous publications, which had a different focus and study purpose, looked more closely on the differences between the control and intervention groups in their results. In the first publication by Andersson and colleagues (2014) greater improvements in stress, mood and substance abuse for the group receiving cognitive intervention could be found. This shows that automated telephone calls are effective not only in monitoring parolees but also in intervening and improving psychosocial well-being. Vasiljevic and colleagues (2017) in their second publication looked at the prediction of recidivism after one-year. When comparing the intervention with the control group no differences could be found in criminal recidivism rates after one year (Vasiljevic et al. 2017: 10).

### *Participants*

The final sample of the original study included 108 paroled offenders (56 in the control and 52 in the intervention group) of whom 105 individuals (97.2%) were male. Age ranged from 18 to 61. According to the authors of the previous publications, no significant differences could be found between the two groups (Andersson et al. 2014: 8f.). Due to the unique combination of types of stressors individuals experienced during their immediate prison release phase and their subjectively perceived severity rating, two cases had to be excluded as no severity rating could be matched to the daily report of stressor. Therefore the sample used in this third publication only includes 106 of the original 108 paroled offenders.

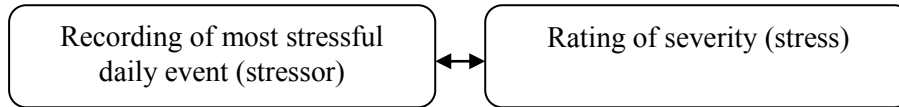
### **Procedure**

As has briefly been described in the introduction of this paper, the initial research project - on which this paper is based - used a well-established automated telephone technique called Interactive Voice Response or IVR (Andersson et al. 2014; Vasiljevic et al. 2017). Automated telephone assessments to study stress-related variables were made at prison before parole (Day 0) and in the form of daily follow-up phone calls during 30 consecutive days after parole (transition from prison). To keep time exposure at a minimum for the participants the procedure in general was designed to be short. The server was programmed to call the parolees on a daily basis between 12 noon and 9 p.m. to collect data. In the pre-assessment the participants made a phone call to the project's central computer with the purpose of registration. The same questions that were later used in the follow-up phone calls were answered (Andersson et al 2014: 5f; Vasiljevic et al. 2017: 5). This daily automated telephone assessment included several relevant items. However, this research paper will only address the last two measures of the initial daily automated telephone assessment to answer the above described research questions.



## Measures

Two of the daily measures obtained through IVR in the initial research project were used in the analysis of this study. First, the assessment of the “daily most stressful event” was made through an open-ended question: “What was the most stressful event today?” Participants were asked to record their most stressful daily event which means a stressor. Second, parolees gave a severity rating which presents the intensity or actual stress these daily stressful events have caused.



The rating of severity was rated by the individual on a scale ranging from *not at all* (0) to *very severe* (9) and was answered by pressing the accurate phone key. High values on the ratings indicate high levels of perceived stress severity. Stressors measured through the open-ended question and therefore the reported daily stressful events were manifold. In order to use this data in SPSS and link those to the severity ratings the answers needed to be coded into different stressor categories. In addition, it is the daily reports of stressful events that provide a deeper insight in what it is that paroled offenders feel stressed about. Therefore these reports were divided into social, psychological and physical stressors. This procedure, which strictly followed a qualitative approach and a classification that was based on literature, will be explained below. Both questions were asked on a day prior to release (pre-assessment) as well as on 30 consecutive days in the immediate prison release phase.

## Ethical Approval

The initial research project and present study was approved by the Regional Ethics Committee at Lund University (File number: 2009-1) and is registered at ClinicalTrials.gov (NCT01727882). All individuals signed written informed consent and were informed about the possibility to withdraw their approval to participate at any given time by getting in contact with the coordinator of the research project and that this would result in their assessments being excluded (Andersson et al. 2014: 5; Vasiljevic et al. 2017: 5).

One important ethical consideration connected to the daily phone calls in this context is the intrusion of privacy. This study did ask sensitive questions on health, the craving for and use of alcohol and drugs and involved phone calls on a daily basis and over the course of 30 consecutive days. However, concerns were outweighed by the aim of the study to use a novel and innovative methodological approach to collect follow-up data over a longer period of time, from the population of paroled offender which is generally known as being “hard-to-reach”. In the long run and if well-established, using IVR to collect data through repeated daily assessments could help us gain a better understanding in various fields of criminological research and among different “hard-to-reach” populations.

## Analysis: Mixed-Method Approach

The fact that both qualitative and quantitative data were collected in the course of the study followed a mixed-method approach (Teddlie & Tashakkori 2009). A combination of qualitative and quantitative data collection and analysis similar to one used for the purpose of this research paper was used in previous research connected to the topics of stress as well as prison reentry (Almeida et al. 2002; Phillips & Lindsay 2011).

### *Categorization and analysis: Daily stressors after prison*

The categorization of stressors as well as the qualitative analysis addresses the question “what” it is that released prisoners experienced as stressful event after prison release. Over the course of the study paroled offenders shared their daily most stressful event by answering an open-ended question. Hence, to get a bigger picture of the human experience of stress in the immediate prison release phase a phenomenological approach (Creswell 2007) was applied for the purpose of this study. Phenomenology has been a popular approach in the social and health sciences and is based mainly on the philosophical works of Edmund Husserl. The main incentive for this methodological inquiry is to step away from individual perspectives and therefore better grasp the lived experience shared by a particular population (Creswell 2007: 58). In the case of this paper the group of individuals is prison releasees and their description of daily stressful events.

In line with the phenomenological approach and to categorize and analyze the stressors participants reported, all different types of daily stressful events assessed through the automated telephone assessment were transcribed and translated. The next step of this process included exploring all statements. All reports of stressors were revisited several times and for each individual separately. Afterwards reports were highlighted and compiled into a list in order to categorize these statements into broader categories of stressors. Therefore they needed to be combined into different proxies in regards to the area of everyday life this event affected e.g. Housing, Finances, Weather or Lack of time or the Social Network. Following literature (Morse 1995; Morse 1998) and previous research (Almeida et al. 2002; Phillips & Lindsay 2011; Pow et al. 2016) the next step consisted of classifying these themes into stressor categories. The broader stressor categories used for this purpose, social, psychological and physical, are based on Morse’s (1995) definition and categorization of stress<sup>4</sup>. Moreover, selected stressor types as well as similar approaches to study stress for different populations have to some extent already been applied by other researchers (Almeida et al. 2002; Andersson 2009; Phillips & Lindsay 2011; Pow et al. 2016). Since the proxies are however based on the participants’ reports and stem from the very specific context of transition from prison some enhance the original contents of Morse’s (1998) stressor categories. As a consequence additional themes that suited the particular stressors of paroled offenders in the immediate prison release phase needed to be complemented. The categorization hence not only assists in classifying the prison releasee’s daily stressful events but also presents the result of the qualitative analysis procedure that was used to explore the qualitative content of the open-ended question. The result of which will be found in the result section of this paper together with the qualitative analysis of the daily reports and a visual overview of the categorization itself. In addition, the qualitative categorization allowed coding the statements into nominal data which then could be used for statistical analysis in SPSS and in connection with the ratings of severity.

Due to the high number of occurrences, a decision was made to also create a category for stressors where the daily stressful event was undefined or not clearly stated by the participant but a severity rating and therefore an indicator of stress was present. This category will be referred to as unspecified stressors.

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<sup>4</sup> see Theoretical Approach - The Concept of Stress in this Paper.



### *Types Prevalence & Average Severity Ratings (Stress)*

SPSS version 22 was used for the statistical analysis. Descriptive statistics are used to focus on the prevalence of the identified stressor types and response rates. Additionally the mean and standard deviation for the severity ratings and in connection to the various stressor categories was analyzed for the purpose of this study. To further compare change in mean over the course of the research cycle repeated measures ANOVA and a paired t-test were conducted. For a better comparison of the results the research cycle of 31 days has been split into different time periods and consists of the *pre – assessment* or *Day 0* and while still in prison and the *immediate prison release* phase (n=30 days) which will in the following be presented as: *day 1 - 10; day 11 – 20 and day 21 – 30*. *Total* in the following will refer to the sum of responses of both the pre-assessment and the immediate prison release phase (n=31 days). Further, to receive a better picture, some tables will present an overview of the unspecified stressors compared to the combination of all social, psychological and physical stressors, which in those cases will be referred to as specified stressors. Specified in this context means that a precise statement on what it was that caused the perception of stress was made and therefore the stressor could be assigned to one of the literature-based stressor categories (social, psychological or physical) unlike in the case of the category unspecified, where this is not the case.

## **4. RESULTS**

Following the research question, what examples of daily stressful events were reported and therefore paroled offenders came across in the first 30 days after prison was one point of interest in this research paper. The three stressor categories defined by Morse (1995): social, psychological and physical helped sorting the various stressful events participants reported which build the types of stressor for this essay. As has been previously mentioned for the purpose of the study the categorization however needed to be enhanced. This can be linked to the fact, that the results in this research paper are based on the descriptions of the participating prison releasees themselves. While Morse's (1998) categorization of stressors was able to match some of the stressors reported by the participants additional proxies also needed to be added to cover all the demands paroled offenders experienced after prison release. *Table I* visualizes the literature-based stressor categorization and includes an overview of the three specified stressor types: social - psychological - physical as wells as all of the corresponding proxies.

Table 1: Categorization: Overview of affected areas of daily stressful events reported by the participants (n=106) in connection to the different identified stressor types: social – psychological – physical

<b>SOCIAL</b>	<b>PSYCHOLOGICAL</b>	<b>PHYSICAL</b>
Argument/Conflict	Holidays / Special Occasions	Accusation / Legal*
Daily Routines*	Emotional Well-being	Follow-Up-Calls *
Employment	Feeling of a Lack of Time*	(=Survey)
Finances	Feeling of Mental Overload*	Temperature
Health	Moment of Release*	Traffic/Transportation
Housing	Sleeping Problems	Weather
<u>Institutions/Authorities*</u>	Transition Phase*	Other external factors
Employment Center/Social Services	Uncertainty / Future*	
Probation Service	Other internal factors	
Police		
Loss / Personal Problems		
Peers/Criminal Activity*		
Sobriety*		
<u>Social Network*</u>		
Family		
Friends		
Relationships		
Supply / Food		
Other social stressors		

\*Proxies that go beyond Morse's (1995; 1998) theory of stress and stressors

### **Social Stressors**

Daily reports like *“not having anything to live”*, *“my bills and debts”* or participants stating that *“meeting the family”* was the most stressful daily event only presents a few of the struggles that build the category social stressors. The most important of which will be elaborated more closely in the following.

Concerning the proxy employment, individuals after prison did not only struggle with finding a job. They also reported starting a job as well as incidents at the workplace as stressful experiences. *“That I have to get up at ten to five for work”* is one of the answers that further indicate that also daily routines coming with employment were perceived as stressors. In the light of these reports, another observation deemed noteworthy is that a lack of employment and financial resources was reported in combination several times. This was manifested through descriptions like *“work and economy”*. Additionally, these two components of social stressors also were among those reported most frequently. It is not unlikely that former sources of income might have involved criminal activity (Gideon 2009: 47). To avoid returning to prison this, however, might not be a valid option at the same time as the stigma of prison release might lead to difficulties to establish oneself on the labor market (Western et al. 2015: 1517). Furthermore and in line with previous research as well as general strain theory, not only financial resources and the achievement of economic goals and status are linked to employment but also possibilities to provide for ones basic supply of food, medicine and other substantial needs (Agnew et al. 2008: 159ff; Western et al. 2015: 1515). Agnew and colleagues (2008) describe economic problems and inability to meet basic needs as an important strain contributing to criminal activity. One that in case of the fragile transition phase of prison releasees is apparent and might even contribute to criminal recidivism (ibid: 161f).

Social networks and possibilities for participation in the community usually depend on income and employment as well. This is linked to mainstream social roles which often rely on these sociodemographic factors and are important for the reintegration into society and the community (Western et al. 2015). It is therefore not surprising that the other component that received a lot of attention during the follow-up calls was the “*Social Network*”. Paroled offenders described “*An argument with my wife*”, “*my daughter does not want to see me*”, “*That my friend has not helped me with what he should have*” or “*I miss my children*” as daily stressful experience. Previous research has shown that in particular strengthening relationships with family, friends and other support networks proved to facilitate the transition from prison to society. Further, stable relationships and family ties may even support crime-free gaps and staying away from substance misuse (Biswanger et al. 2012: 1; Calcaterra 2014: 47; Visher & Travis 2003: 93). This appears also to be in line with Hirschi’s (2002) social bond theory. The real-world context - as described through the reports of participants - shows that existing personal ties and networks of a former inmate can be weakened and tensions are not unusual due to complicating factors like a lack of financial resources, stigmatization of imprisonment, or relationship problems. However, these factors are likely to complicate the individuals bonds to society at large as well. Involvement for example - which represents one of the four elements of social bonds theory - might be difficult to obtain for prison releasees who frequently face discrimination on the labor market and therefore also in achieving conventional status and “mainstream” roles. This lack of involvement and difficulties to successfully reintegrate into society may also affect an individual’s commitment to stay clear of delinquent behavior. According to Hirschi (2002) and Toby (1957) a certain commitment to society would predict that individuals stay away from crime in order to maintain acquired goods like a support network, reputation a career or relationships. If however all of these good seem hard to reach and the way there is filled with obstacles, it might not present a valid option to do so but rather to go back to well tried patterns instead that in some cases even could lead to criminal recidivism (Hirschi 2002: 20; Toby 1957: 16).

Another proxy of social stressors was experienced in connection with Probation Service as well as authorities and other public organizations. Here it was mainly the meetings with authorities that put pressure on the paroled offenders. One participant for example stated clearly that “*authorities don’t understand that you do not have it easy. You should just meet their terms all the time. It stresses me*”. According to Gideon (2009) there is an ongoing discussion about after-release-supervision and what it should look like. Researchers agree that prison releasee’s benefit from a seamless treatment and formal social support after prison through their assigned probation officers. However, in the findings at hand it appears as if this tends to be linked to a perception of stress. Many participants stated that missing a meeting with probation service, as well as the sum of appointments with Probation Service, Social Service and other institutions and authorities caused stress for them on a daily basis.

Following literature topics like sobriety, the involvement with old criminal peers and therefore criminal activity were expected to be a critical component in this fragile stage (Biswanger et al. 2012: 5; Calcaterra et al. 2014: 42; 47; Visher & Travis 2003: 98). Even though all of these factors were named and therefore did affect the immediate prison release phase in form of a perceived stressful event by participants of the study, they were limited to only a few reports.

Besides the large amount of social stressors also two additional specific stressor types' - Psychological and Physical - could be identified through the reports of participants. These have so far not been explicitly mentioned in previous research on prisoners' reentry process.

### **Psychological Stressors**

A feeling of mental overload and a lack of time was a common issue experienced in the prison release phase, as was a feeling of uncertainty and worries about the future. As has been described in the theoretical approach, this type of stressor is usually self-induced (Morse 1995: 7). Participants expressed these internal struggles by stating that "*I'm worried about my future*" or "*My whole life situation, a lot should be done in a short time*". Also sleeping problems were included in this category and indicated by descriptions like "*I'm having nightmares*" or "*I have difficulties falling asleep*". Although not in the focus of previous research, these issues should not be underestimated. It is important to understand, that facing multiple challenges during the phase of starting fresh can be an overwhelming and frustrating experience and often comes with stigmatization and social isolation (Western et al. 2015: 1537). Studies show that relapse into addiction behavior or even an overdose after release from prison happens frequently (Biswanger et al 2012: 5; Calcaterra et al. 2014: 46). In many cases it is a way to deal with stress, hopelessness and a lack of ability to cope with the transition alone and can be linked to depression and anxiety. Factors that according to literature fuel the desire to go back to well tried patterns of criminal activity alcohol and drug consumption to deal with these situations (Calcaterra et al. 2014: 47; Visher & Travis 2003: 95; 103).

### **Physical Stressors**

This category could also be referred to as external or environmental stressors. Reports that were identified as this type of stressor for example included the weather, complaints about temperature as well as the public transportation. In line with Morse's (1995) definition of this category this type of stressor are for the most part probably easy to avoid. However, life circumstances of paroled offenders vary. Maybe even issues described in the social stressor type e.g. homelessness, lack of financial resources or regulations in connection with authorities might complicate to stay away from these external agents. Physical stressor can also have an impact on the overall well-being. One paroled offender for example reported: "*It is the heat, it makes me tired*" as a daily stressful experience. Public transportation was especially an issue in regards to being on time for work or other important meetings. Individuals often answered by stating that "*missed the bus*" or "*The bus didn't work when I was on my way to work today, so I was delayed 40 min.*" All of these are of course factors that also affect other groups within society. However, the public transportation example shows clearly that stressors are interrelated. Having to deal with a delayed bus on the way to work might be experienced as stressful as it also might have a negative effect in the context of employment.

One component that has been identified as a physical stressor several times in this study is the survey itself. Daily follow-up phone calls were used to collect data for the initial research project which has been described above and also included the two measures used in this research paper. Participants showed a tendency to experience these telephone calls as stressful events. Statements in this regard were for example: "*That you call the whole day has been fucking tough*" or "*the phone*

*calls begin to get a little annoying*” but also *“that you called right now”* and *“stop calling”*. The latter is especially concerning. In the beginning of the research project all participants signed written informed consent and were well informed about possibilities to end participation by getting in touch with the coordinator of the research project (Andersson et al. 2014: 5). Even though it becomes apparent that these calls were perceived as a disruptive event in the daily life, none of the individuals reporting the received follow-up phone calls as stressful withdrew consent during the research cycle. In most cases people continued reporting their daily stressful events in the following days. Thought was given to this complex issue, which is mainly connected to the research process itself. It will therefore be revisited in more detail in the Discussion of this paper.

### **Unspecified Stressors**

This category is not literature base and was formed due to a high number of participants who did not clearly state what caused their perception of stress. They either answered the open-ended question by stating that there was *“nothing special”*; *“everything”* or that *“nothing”* has been the most stressful event during the day. In a few occasions no report at all was given, however in all of these cases at the same time and in a next step individuals did give a stress severity rating above 0 and therefore indicating perceived stress. We lack information if participants did not know the source of the perceived stress or if they did not want to specify a stressful event. Therefore we are lacking information on what type of stressor it is that caused the severity rating. However, stress was still indicated through the participants rating. A decision was made to categorize these types of answers as unspecified stressors and in some parts include them in the statistical analysis, however, solely when a rating above 0 was made by the participant.

### **How many social, psychological and physical stressors were reported over the course of the study period?**

In total and over the duration of the study period including Day 0, out of 3286 (n=31 days x 106 participants) possible daily reports participants recorded 2249 stressors. Those stressors have been categorized and assigned to one of the stressor categories described above. On average parolee offenders reported a stressors in 20.5 (SD = 10.4) follow up interviews in their immediate prison release phase. Twenty-five (23.6 %) individuals reported a stressor on each of the 30 days after parole and another 11 (10.4 %) named a stressor on all but one phone interview. Only one individual that participated in the pre-assessment did not answer on any of the 30 days.

In *Figure I<sup>5</sup>* an outline of the overall response rate for the possible follow-up telephone calls (assessments) compared to the actual response rate of reported stressors is visualized. It however, does not yet provide us with any information on which of the above described types of stressors it is that has been reported.

Since this paper aims to find out more about the transition after prison it is interesting to only look at the immediate prison release phase (n= 30 days x 106 participants) and therefore without Day 0. Here we see that out of 3180 follow-up assessments that would have been possible (Day 1-30), stressors were only stated

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<sup>5</sup> A table including more detailed description of overall response rate will be provided in the Appendix 1.

on 2148 (68%) occasions while 1032 times (32%) no statement of a daily stressful event was given by participants of the study.

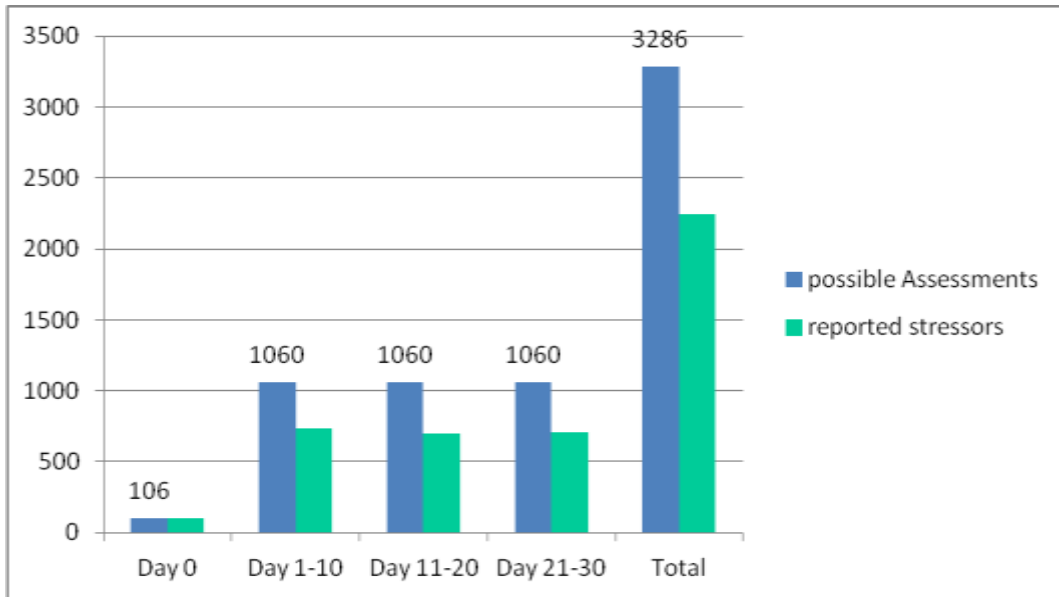


Figure 1. Overall response rate of daily stressful events during the study cycle.

The analysis also shows that at baseline, also referred to as pre-assessment, 101 out of 106 participants (95%) reported a daily stressful event. However, this number dropped already on Day 1 were only 77 individuals (72%) responded to the open-ended question. Over the course of the research cycle this number remains more or less stable ranging between 66 to 80 individuals reporting daily stressors in the immediate prison release phase. Overall the response rate in connection with both qualitative and quantitative responses appears to slightly decline over the course of the study.

In Table 2 and Table 3 the frequency of stressors as reported by the participating paroled offenders will be addressed in more detail. To create a clearer picture a decision has been made to first look at the prevalence from a wider angle before zooming into a more detailed description of the reported stressors.

Table 2. Frequency (%) of reported stressors *no response / unspecified stressors / specified stressors* reported by the participants (n=106) presented in total (n=31 days) and over the course of different time periods.

	<b>NO RESPONSE</b>	<b>UNSPECIFIED STRESSOR</b>	<b>SPECIFIED STRESSOR*</b>
<b>DAY 0</b>	5 (5%)	65 (61%)	36 (34%)
<b>DAY 1-10</b>	323 (31%)	544 (51%)	193 (18%)
<b>DAY 11-20</b>	358 (34%)	553 (52%)	149 (14%)
<b>DAY 21-30</b>	351 (33%)	582 (55%)	127 (12%)
<b>TOTAL</b>	1037 (32%)	1744 (53%)	505 (15%)

\*This Category includes all social, psychological and physical stressors reported in the follow-up telephone calls.

In *Table 2* we zoom in for the first time. We will look at the prevalence of reported stressors in regards to the number of times participants clearly stated what the daily most stressful event was compared to the number of times where the cause of the perceived stress was either not identified or not expressed clearly by the individual.

It becomes apparent that unspecified stressors build the largest group within this sample of paroled offenders. Interestingly, unspecified stressors even appear to increase over the course of the study. In total 1744 (53%) unspecified stressors compared to only 505 (15%) specified stressors could be identified, representing a relatively large difference in size between these groups. So only in 505 cases we do know what causes the perception of stress, while for the majority of daily reports we unfortunately lack this information.

*Table 3* shows examples of social (n=336), psychological (n=85) and physical (n=84) stressors that was recorded during all assessments (day 0-30), so during both pre-assessment and the 30 days following parole from prison. Overall, social stressors, build the largest category of specified stressors among this population of paroled offenders. Psychological and physical stressors approximately share the same size and each only makes up for 3% of the total stressors, since they could be identified on much fewer occasions then their social counterpart. Social, psychological and physical stressors seem to be highest immediately after prison release (from Day 1 to 10) after that they seem to continuously decrease over the course of the first 30 days after prison release. The opposite appears to be true for the unspecified category, which shows a continuous increase in frequency.

Table 3. Frequency (%) of the stressor categories displayed separately for *Social, Psychological, Physical and Unspecified Stressors*.

	<b>Unspecified</b>	<b>Social</b>	<b>Psychological</b>	<b>Physical</b>	<b>Total</b>
<b>Day 0</b>	65 (64%)	20 (20%)	12 (12%)	4 (4%)	101 (100%)
<b>Day 1-10</b>	544 (74%)	122 (16%)	35 (5%)	36 (5%)	737 (100%)
<b>Day 11-20</b>	553 (79%)	96 (14%)	22 (3%)	31 (4%)	702 (100%)
<b>Day 21-30</b>	582 (82%)	98 (14%)	16 (2%)	13 (2%)	709 (100%)
<b>Total</b>	1744 (82%)	336 (12%)	85 (3%)	84 (3%)	2249 (100%)

At baseline social stressors were reported by 20 (20%) subjects. During the follow up period the frequency of social stressors ranged between 122 (16%) during the first 10 days (day 1-10) after leaving prison to 98 (14%) during the final 10 days (day 21-30). For psychological stressors baseline assessment shows 12 (12%) reports by subjects. During the follow up period the frequency of psychological stressors ranged between 35 (5%) during the first 10 days (day 1-10) after leaving prison to 16 (2%) during the final 10 days (day 21-30). Last but not least physical stressors were reported by 4 (4%) subjects during pre-assessment and while still in prison. During the follow up period the frequency of physical stressors ranged between 36 (5%) during the first 10 days (day 1-10) after leaving prison to 13 (2%) during the final 10 days (day 21-30).

As has been established before the category unspecified stressor only tells us that in some sort of way stress was perceived by the participants, but we lack information on what area of daily life are affected. Specified stressors including social, psychological and physical stressors do provide us with that sort of information. Hence, when looking at the perceived severity ratings we will concentrate more closely on these three specified stressor categories.

### **Stress severity ratings**

On 31 days a follow up of 3286 ratings would have been possible. In total 2240<sup>6</sup> ratings connected to either specified or unspecified stressors were reported by the participants. In connection with the 505 specified stressors identified as social, psychological or physical, 496 severity ratings were made. In comparison all 1744 unspecified stressors received a rating.<sup>7</sup> On a total of 1046 times no rating was given. On average the participating paroled offenders rated a daily most stressful event on 22 (SD 10.5) follow-up assessments. All individuals gave a rating on at least two occasions but only 27 participants (25.5%) made a severity rating on all 31 days.

<sup>6</sup> A figure visualizing the overall response rate for all severity ratings during the study cycle will be provided in the Appendix 2.

<sup>7</sup> A table including the frequency of severity ratings made in connection to the specified stressor categories is provided in the Appendix 3.



Figure II visualizes the progression of the average stress severity over the course of the research period. *All ratings* refers to the severity ratings made in connection to specified and unspecified stressors. Compared to that, we can also see the perceived severity ratings experienced for each specific stressor type separately.

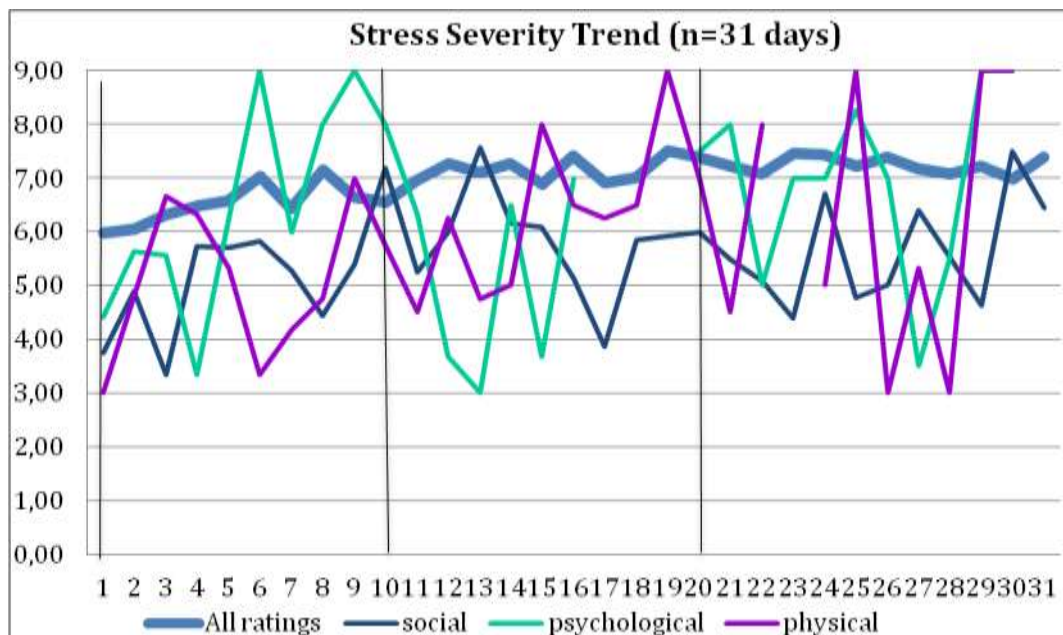


Figure II. Progression of severity ratings over the course of the research period. (1 = Day 0; 31 = Day 30)

In an attempt to find out if there is a significant change in the perceived stress severity level over time both a one-way repeated measures ANOVA and a paired t-test was conducted. The aim of the one-way repeated measures ANOVA was to compare the average severity ratings over the course of Time 1 (pre-Assessment), Time 2 (Day 1-10), Time 3 (Day 11-20) and Time 4 (Day 21-30) - for all ratings and each specific stressor type (social, psychological and physical) individually. Additionally, the t-test was conducted to compare the consecutive time periods pairwise to each other in order to see more clearly which of the means differed between the different time periods.

For both the ANOVA and the t-test meaningful results could only be obtained when ratings for all stressors both specified and unspecified were considered. For the one-way repeated measure ANOVA the results show that Wilks' Lambda=.002 ( $F(3,73)=5,59$ ,  $p<.002$ ). According to the commonly used guidelines by Cohen (1988) and in line with Pallant (2003: 226f), the effect size of this result (multivariate partial eta squared=.19) appears to be large. This means that there was a statistically significant effect in time and that there was a change in the average stress severity perception connected to all unspecified and specified stressors across the different time periods. This test does not tell us exactly which means of perceived stress severity differed (Field 2014: 561), but the paired t-test does. It shows that statistically significant difference in the average perceived stress severity can be found between Time 2 and Time 3 ( $p<.024$ ), which, when looking at the time period, points towards the middle of the immediate prison release phase. Intriguingly, when we compare the two means (see Table 4) we can observe an increase in the average stress severity perception between Day 1 – 10 to Day 11 – 20 that is statistically significant.

The same procedures were then done for each specified stressor type individually, but no statistically significant changes could be observed. This limitation to produce results for each specified stressor group separately will be revisited in the conclusion of this paper. Since it is still considered important to get a picture of the average stress severity paroled offenders reported in the first 30 days after prison a more simplistic approach using descriptive statistics will be applied.

*Table 4.* Average perceived stress severity I - mean and standard deviation of all qualitative and quantitative responses over the course of the research cycle.

	MEAN		STANDARD DEVIATION
<b>DAY 0</b>	5.98		3.25
<b>DAY 1-10</b>	6.51*	p=<.024	2.15
<b>DAY 11-20</b>	6.99*		2.24
<b>DAY 21-30</b>	7.15		2.30
<b>TOTAL</b>	6.65		1,94

An indicator of a high stress level (severity rating of 9) was present in 1272 reports and was made by the participants in connection with either a specified or unspecified stressor. Out of the 496 specified stressors identified as either social, psychological or physical only 65 times a rating of 0 indicating not stressful was made by the participants in connection to either a social, psychological or physical stressor. This indicates that even though they reported a stressor it did not affect their stress level. We further know that the pre-assessment is the only day were all 106 participants rated the severity of a daily most stressful event, however, not all identified a specific stressor.

At baseline 36 severity ratings were made in connection to one of the specified stressor categories. After that, numbers of severity ratings ranged between 193 (38%) in the first ten days (Day 1-10) after prison release and 125 (30%) severity ratings in the last ten days (Day 21-30). *Table 4* presents the overall perceived stress severity including all severity ratings for both specified and unspecified daily stressful events.

During the pre-assessment, the stress severity ratings showed a mean of 5.98 (SD 3.25). A trend can be observed that when all specific and unspecified stressor categories are taken into consideration the stress severity level keeps increasing after prison release. More interestingly it not only appears that the average perceived stress levels rises continuously during this prison release phase but that there is also a peak in perceived stress severity in the third term (Day 21-30). Statistical analysis using paired t-test further shows a significant change between Time 2 and Time 3. In a next step we want to explore the average perceived severity provided separately for each of the specific stressor categories.

So in *Table 5* we zoom in again and focus on the three specified stressor categories separately. We now see that compared to the pre-assessment on Day 0 the three stress levels for social, psychological and physical after prison release all raise to an average mean above 5. For social and physical stressors we can see that the average perceived severity first increases and then decreases between Day 21 to Day 30. Psychological stressors on the other hand display a sudden drop of average perceived stress severity from Day 11 to 20 that then increases again in the last term of the immediate prison release phase indicating that daily stressful events categorized under this type have been perceived more severe by the participating paroled offenders in the last ten days of the study period. When comparing all three stressor types it becomes also clear that physical stressors,

including demands like the weather, temperature, public transportation, but unfortunately also the follow-up phone calls made to collect this data, were on average (Mean = 5.84; SD 2.60) perceived slightly higher than their social and psychological counterparts.

*Table 5* Average perceived stress severity II - mean (SD) for quantitative ratings made in connection to *social - psychological - physical stressor*.

<b>TIME SPAN</b>	<b>SOCIAL</b>	<b>PSYCHOLOGICAL</b>	<b>PHYSICAL</b>
<b>DAY 0</b>	3.75 (SD 3.26)	4.42 (SD 3.17)	3.00 (SD 2.71)
<b>DAY 1-10</b>	5.24 (SD 2.58)	5.74 (SD 2.54)	5.61 (SD 2.50)
<b>DAY 11-20</b>	5.84 (SD 2.55)	4.95 (SD 3.33)	6.38 (SD 2.63)
<b>DAY 21-30</b>	5.51 (SD 2.77)	6.57 (SD 2.74)	6.00 (SD 2.69)
<b>TOTAL</b>	5.05 (SD 2.58)	5.58 (SD 2.72)	5.84 (SD 2.60)

In the following discussion, these results will be put into context with findings from previous research. Moreover, obstacles that were encountered during the research process will be addressed.

## **5. DISCUSSION**

The research paper at hand aimed to learn more about daily most stressful events and the stress severity perception of paroled offenders in the transition from prison to society. To do so, the initial study by Andersson et al. 2014 used Interactive Voice Response (IVR), an automatic telephone assessment. Repeated measures of qualitative reports on daily most stressful events and quantitative severity ratings as perceived by paroled offenders in the first 30 days following prison release were collected. Only a few studies so far have handled the topic of stress and stressors in the transition from prison to society. And even though the results are limited, the research paper at hand was able to prove the practicality of IVR when used to study a population characterized as “hard-to-reach”.

Prison reentry is a time that is often associated with high levels of stress. Western and colleagues (2015) even described prison release as a “disruptive event” that due to its unpredictable effects leads to a “stress of transition” (Western et al. 2015: 1540). The findings of the essay at hand with regard to the level of stress after prison release confirms this (Bereswill 2004: 318ff). Due to the limited number of participants that reported specified stressors (social, psychological and physical) difficulties arose when trying to obtain changes in the mean of severity ratings. Both repeated measures ANOVA and paired t-test merely delivered significant results when unspecified stressful events were included in combination with all specified stressor categories.

Despite this drawback findings conclude that for all three specific stressors (social, psychological and physical) the average stress severity increased over the course of the 30 days after prison. This is in line with Gideon (2009) as well as Western and colleagues (2015) who state that the level of stress usually is reinforced within the immediate prison release phase (Gideon 2009: 44; Western et al. 2015: 1537f.). While the average stress severity of social and physical stressors is highest between Day 11 to Day 20 a sudden drop of the average perceived stress severity for psychological stressors can be observed in this time period. Social stressors on average were perceived as the least stressful when compared to its two counterparts. Interestingly, psychological stressors show a

sudden drop of average perceived stress severity in the middle of the study period, which then rises again towards the end of the research cycle. Additionally physical stressors were on average perceived as the most stressful ones. It is possible that the high average stress severity is linked to e.g. adverse weather conditions as many participants stated to be bothered by heat and hot weather. Given the often vulnerable and difficult life circumstances of prison releasees it might after all not always be so easy to simply avoid these external stressors as is suggested by Morse (1995).

The average stress severity tends to be much higher when we look at specified and unspecified stressors together. This result is most probably linked to the unspecified stressor category. In this case statistical analysis using paired t-test further shows a significant change in the middle of the study period. Unfortunately the data does not allow any assumptions in regards to why the participants' stress level increased at this point of time and where the significant change came from. A high level of stress in the immediate prison release phase has, however, also been claimed in previous literature (Bereswill 2004: 320). It could be assumed, that leaving the highly institutionalized setting of prison and being responsible for one's own routines and establishing themselves in free society is associated with the level of stress (Gideon 2009: 44). That this rises in the middle of the first 30 days after prison could be connected to a feeling of joy and relief of finally being free again. This feeling, however, can shift when paroled offenders face obstacles of the transition phase or experience a lack of support (Phillips & Lindsay 2008: 150). To look deeper into perceived stress severity after prison would hence be an interesting topic for future research.

Furthermore, it is important to mention, that the study at hand did not regard differences in the average stress severity between the control group and the group that received cognitive intervention. In previous studies of this research project, mixed results could be found when testing for group differences. On one hand Andersson et al. (2014) found greater improvements in stress, mood and substance abuse when looking at the obtained summery scores in their research paper. However, only the severity ratings and not the most stressful events were investigated. Vasiljevic et al. (2017) on the other hand could not detect any group differences when looking at stress-related variables and one-year criminal recidivism. For the purpose of this study a differentiation between intervention and control group was renounced as the main focus of this research paper was to learn more about the types of stressors and areas of everyday life that are affected in the immediate prison release phase. A continuation of this project could however use these two groups to see if the opportunity for people to express their daily most stressful event in an open-ended question and more importantly the feedback at the end of the telephone assessment affects the average stress severity over the course of the study.

By following Morse (1995) categorization of stressors as well as a phenomenological approach the study at hand further manages to give an insight on the individual daily reports of stressful events made by released prisoners. Through the qualitative analysis of the reported daily most stressful events made by paroled offenders a set of proxies could be established under each stressor category. Some of these are in line with Morse's (1995; 1998) literature, nevertheless the daily reports also revealed a need to widen the categorization and therefore add proxies so that it better fits the life circumstances and shared

experience of prison releasees during this transition phase. Some of these additional themes point towards criminological theories e.g. social bond and general strain theory, which have been applied to put these findings into a broader criminological context. Considering that proxies and findings were added to widen Morse's original stressor types, a decision was made to include the categorization in the result section. In hindsight it can of course be argued that the originally chosen categorization was not a perfect fit from the beginning and therefore needed to be enhanced. However, as can be drawn from the background section of this paper, not many research papers have dealt with this complex issue of stress and stressor in the immediate prison release phase. The categorization at hand therefore should be seen as a first attempt to classify parolees' daily stressors and needs after prison release, one that is open for further development and improvement in future research. Possibilities to categorize daily stressful events are numerous and should also be subject of future studies.

To a large extent the daily stressful events were identified as social stressors. Unlike psychological and physical stressors, social stressors have to some extent played a role in previous literature on prisoners' reentry. Proxies included in the category social stressors were the most frequent ones and were in total reported on 336 out of 505 occasions. Psychological stressors were reported on 85 occasions and physical stressors were reported on 84 occasions. What has been identified and defined as social stressor in this research paper appears to be in accordance with previous stress-related research as well as studies on reentry and relapse into substance misuse after prison. However, they also enhance these previous findings (Biswanger et al. 2012; Calcaterra et al. 2014). Reports of daily stressful events that add up to the category social stressors affect many different areas of the everyday life of paroled offenders. This could be the reason why it is reported most frequently. Other authors however tend to refer to these issues as "milestones of the transition phase" (Visher & Travis 2003: 107; Western et al 2015: 1515). Daily stressors similar to the findings in the paper at hand and included in the category social stressor like: *social networks*, *finances*, *housing*, *employment*, and *sobriety* have been established as important components for the reintegration process and the material and social well-being (Western et al. 2015: 1515).

Moreover and as has been pointed out earlier in this paper, some of these factors reported by prison releasees can be linked to criminological theories as well. Economic problems for example, which present a major concern and daily stressor for paroled offenders participating in this study, also have been identified as an important strain associated with delinquency (Agnew et al. 2008). It is the lack of money, not being able to cover basic needs or to provide for other family members and linked to that the inability to achieve a "mainstream" status that causes stress and frustration, especially in a vulnerable time like the transition from prison. Previous research on strain theory (Agnew 1992; 2000; see also Agnew & Jones 1988; Greenberg 1977) has identified financial problems as strain that is likely to contribute to criminal activity. Not being able to meet basic needs, like housing, food, medical care or the ability to engage in desired activities may for some individuals lead to coping strategies that involve illegal means to obtain money or status (Agnew 2008: 161f). And even though testing classical strain theory was not in the focus when the data originally was collected some of the findings underpin this theory as well as findings of previous studies on this matter. For the paper at hand, strain theory not only helps to put the findings drawn from

the open-ended question into a broader context, but it also highlights the relevance of these results for the field of criminology. Beside putting an even stronger focus on criminological theories and the stressors identified throughout the research process a continuation of this study could further use the findings linked to daily social stressors (e.g. the proxies housing, employment or family ties) in relation to recidivism one year after prison release.

In general, all these reported daily stressful events could just as well be understood as needs of those who reported them. Former inmates often leave prison without the proper tools to deal with these situations. It therefore comes with little surprise that struggles obtaining material and social well-being are perceived as stressful (Biswanger et al. 2012: 5; Calcaterra et al. 2014; Western et al 2015: 1515) as has been reported and experienced by the participants of this study. An inability to reach conventional goals, establish oneself on the job market as well as struggling with the stigma of being a prison releasee can not only complicate family ties and relationships but also individual bonds to the society at large. For paroled individuals being accepted and not met with discrimination as well as repairing broken bonds seems to be a major obstacle after prison release, a lack of which has been correlated to criminal activity in previous research and literature (Biswanger et al. 2012; Calcaterra et al 2014; Hirschi 2002). “Control theories assume that delinquent acts result when an individual’s bond to society is weak or broken.” (Hirschi 2002: 16) It is Hirschi’s (2002) social bond theory consisting of the four elements - attachment, commitment, involvement and belief - that helps to understand this stressor and its association to criminal behavior and recidivism better (Hirschi 2002: 16). Following the daily reports of participants it becomes visible that it is often the element of commitment to society that is blocked due to various stressors like difficulties on the labor market, economic problems, stigmatization, weak ties to family and friends and other everyday obstacles prison releasees have to face in this transition phase (Hirschi 2002: 22). At this point it is therefore important to highlight that successful reintegration after prison release not only needs the prison releasee’s involvement and commitment but also society’s willingness to offer possibilities that allow the individual to find its way back and set foot again. Another starting point to facilitate the transition after prison could be to find ways to strengthen relationships with family, friends or if not available other support networks prior to release, as a lack of social support and weak social network was reported several times as stressor after prison release. Reactivating and working on formal and informal social support networks would therefore be an important step in facilitating the reintegration process and could be an important objective of future research but also the criminal justice system.

Findings further show, that the probation service and other public institutions e.g. employment center and social services play a crucial role in the immediate prison release phase. Nevertheless, many participants reported meetings at and regulation from these institutions as most stressful events. According to findings in Visher’s (2004) pilot study, a large number of prison releasees return to prison not because of new committed crimes but because they violate their probation and release conditions (ibid: 164). The results of this study only allow speculation to why probation service is experienced as stressor rather than support. It is often the case that organization working in the field of transition and reintegration after prison release struggle with underfunding at the same time as they have to deal with growing caseloads that exceed their resources. Probation officers are overworked

and face scarce time resource. All of this does affect the reintegration phase for paroled offenders as well. Due to these structural struggles that Prison and Probation Services often have to face, it is not unlikely that the main focus of their work is put on monitoring prison releasees rather than providing a formal social support network, simply because financial and time resources are not available. Moreover, given that probation and parole are not voluntary but rather linked to enforcement than support might also explain why it is experienced as a stressor (Biswanger et al. 2012: 6). A closer look on the structure and design of the transition phase in regards to monitoring hours, formal support networks as well as the probation setting and the frequency of meetings could therefore be of interest for organizations of the criminal justice system.

The study at hand also established a category of psychological stressors. This type of stressors has so far not been in the focus of previous research. Literature however shows that psychological or internal factors are likely to reinforce old patterns and maladaptive coping strategies, especially in a vulnerable time like the reentry phase (Biswanger et al. 2012; Calcaterra et al. 2014; Visser and Travis 2003). Participants reported a feeling of overload and lack of time as daily stressors. Gideon (2009) pointed towards the fact that leaving prison also means leaving an institutionalized setting that is characterized by strict structures and rules. In the immediate prison release phase even the simplest routines and being responsible for their own daily rhythm can result in a feeling of stress (ibid: 44). Future research could therefore also benefit from these first findings and in a next step look more closely on these self-induced struggles linked to re-learning processes of daily routines that individuals after prison are dealing with.

Among the group of physical stressors a tendency of participants to feel stressed about the daily follow-up assessments could be observed. As has been established in the results above, this was one proxy included in this stressor type that was reported several times. We also know that this category on average was also perceived as slightly higher compared to the others. Ethical concerns that have been previously mentioned in the Method Section of this paper include the intrusion of privacy. Nevertheless, additional thoughts were given to this finding and in connection with the data collection process. In the study at hand three issues become apparent connected to the daily follow-up assessments.

First of all, when participants reported a stressor, they were also likely to give a severity rating. Results show that out of 505 reported daily stressful events 496 also received a severity rating. In 1744 cases no daily stressful event was clearly defined or stated however still a rating was made. The limitation that in several cases paroled offenders stated that it was “nothing special” that stressed them, “everything” or “nothing” when in a next step they did give a severity rating indicating stress makes it difficult to pinpoint a certain need. Reasons why participant decided not to clearly state the cause of the stressor can be manifold and vary between, the respondents not knowing what caused the experience of stress as well as not wanting or being able to express it to someone. It shows that although we might not get a clear picture on the actual agent of stress (stressor) in all of these cases and lack precise information about the stressor type on some reports, we still know that stress was perceived.

Furthermore, something about these daily follow-up assessments was perceived as stressful by the participants. When we look at the initial research project only the

two last measures were designated to the study of stress for this paper. Furthermore, questions to sensitive areas like health and substance abuse were asked in the course of the initial assessment. Therefore, it is possible that not the open-ended question about the daily most stressful event and severity rating caused stress. However, asking a series of sensitive questions before approaching the actual issue of stress and stressors could have affected the answer to the open-ended question and the severity ratings in this context. In the light of these results future research might achieve stronger results from a sole focus on these two topics in the transition phase.

The main issue here is however that even though participants stated clearly during the follow-up assessments, that it is the telephone assessment that they perceived as daily most stressful event, the calls still continued. It is true that none of these participants officially withdrew their participation and that the paroled offenders were well-instructed how to do so before they signed the written consent. But, given that it remains unclear what consequences and effects the telephone assessments and the stress they caused had on the immediate prison release phase and long-term outcomes, this has to be viewed as problematic. At the same time, researchers often have difficulties getting and staying in touch with this “hard-to-reach” population and vulnerable group of individuals. So, can it be argued that this outweighs the fact that participants were stressed by the survey? Yes and no! For researchers to stay in touch with vulnerable groups and to find out more about their specific life-circumstances it is crucial to come up with innovative approaches that in return might lead to better understanding and deeper insight into the everyday complexities these individuals face. As has been presented the used automated telephone technique Interactive Voice Response presents itself as such an innovative approach that addresses these challenges. Both previous publications of the initial research project yielded good results by using automated telephony to collect data from the elusive population of paroled offenders (Andersson et al. 2014; Vasiljevic et al. 2017). Nevertheless, considering that it is essential not to harm or stress the participating individuals’ improvements in regards to this method are necessary. Acknowledging the difficult time paroled offenders are going through after prison release and the heaviness of this transition phase could be beneficial for this process. One attempt to make these phone calls less stressful could be to finish off with a more positive aspect. For example by ending the calls with a more encouraging question like: “What did you experience as successful today?” or “How did you manage to overcome this daily stressful event?”. This could not only leave the probationer with a more positive feeling at the end of the telephone call but might also give an insight on possible resistance of temptations, protective mechanisms and factors as well as coping strategies.

Last but not least, previous publications of this research project (Andersson et al. 2014; Vasiljevic et al. 2017) further identified stress and stressors as acute dynamic risk factors. Given the fact that dynamic factors can be subject to change and are not static (Vasiljevic et al. 2017: 2) all the above findings on stress in prison reentry can be of future value for treatment planning in the Probation and Prison Service. Adopting this knowledge about stressors and stress experienced in the immediate prison release phase by paroled offenders into the field of probation and reintegration could be beneficial for the outcome of the prison reentry phase. It could assist professionals working in this field to develop those tools and strategies that according to previous findings prison releasees are often missing.



## **6. CONCLUSION**

This study explored stressors after prison release. Three types of stressors defined by Morse (1995) as well as a set of proxies that consist of participants' daily reports were established and used to categorize daily stressful events in the immediate prison release phase. Following literature and previous research a categorization system that suited the three stressor categories and purpose of this research paper could be identified: social, psychological and physical. Thereby social stressors were by far the most frequently reported, whereas, physical stressors were perceived as the most severe by paroled offenders. Overall severity rating increased over the course of the 30 days after prison.

This study further supports the feasibility of Interactive Voice Response used in the sample of paroled offenders within the Prison and Probation Service. By using both qualitative reports of daily stressors and quantitative severity ratings a valuable insight and a clearer picture of possible stressors in this transition phase from prison could be drawn. Despite small obstacles, the automated telephony approach proved itself as valid method to overcome methodological limitations of previous research. Many fields within criminological research and especially those were longitudinal and follow-up studies are common, could benefit from this telephone technique. The author is well aware that the findings in this research paper are limited, due to the scope of only two measures used to answer the research questions and a large amount of reported unspecified stressors. Even though the findings asks for further research, the paper still provides a first step towards overcoming a knowledge gap found in the field of prisoners' reentry. It is a contribution to a better understanding of the role of stress in the transition phase back to society. In addition, suggestions for future research could be provided. All in all, it could be established that a stressor always indicates a certain need. This paper therefore adds to the knowledge of the specific needs of paroled offenders. The findings show that a smooth transition from prison to society can only be achieved if a willingness to do so is present on both sides and not only from the individual leaving prison. This however requires a rethinking process in the society at large. Besides struggles on the labor market and economical problems it were in particular weak and broken ties in the social network that prison releasees experienced as stressors which often is accompanied by a feeling of mental overload. All of these stressors also point us towards social bond and general strain theory which highlights its importance and relevance for the field of criminology. These factors have previously been found to be correlates and risks for delinquent and criminal behavior. Professionals working in the field of probation and reintegration of prison releasees could benefit from adopting these findings into treatment planning.

## REFERENCES

Agnew, R. (1992): Foundations for a General Strain Theory of Crime and Delinquency. *Criminology*, Vol. 30, p. 47-87.

Agnew, R. (2000): Strain and subcultural crime theories. In Sheeley, J.F. (Ed.), *Criminology. A Contemporary Handbook*. Belmont, CA: Wadsworth, p. 349-371.

Agnew, R. (2001): Building on the Foundation of General Strain Theory. Specifying the Types of Strain most likely to lead to Crime and Delinquency. *Journal of Research in Crime and Delinquency*, Vol. 38/4, p. 319-361.

Agnew, R. et al. (2008): Socioeconomic Status, Economic Problems and Delinquency. *Youth and Society*, Vol. 40/2; p. 159-181.

Agnew, R., Jones, D. (1988): Adapting to deprivation. An examination of inflated education expectations. *Sociological Quarterly*, Vol. 13, p. 681-704.

Almeida, D. M. et al. (2002): The Daily Inventory of Stressful Events. An Interview-Bases Approach for Measuring Daily Stressors. *Assessment*, Vol. 9, p. 41-55.

Almeida, D. M. (2005): Resilience and Vulnerability to Daily Stressors Assessed via Diary Method. *American Psychological Society*, Vol. 14/2, p. 64-68.

Andersson, C. (2009): Alcohol Use and Stress in University Freshmen. A Comparative Intervention Study of Two Universities. *Clinical Alcohol Research: Malmö, Sweden*.

Andersson, C. et al. (2014): Daily Automated Telephone Assessment and Intervention Improves 1-Month Outcome in Paroled Offenders. *International Journal of Offender Therapy and Comparative Criminology*, p.1-18.

Bereswill, M. (2004): Inside-out. Resocialisation from prison as a biographical process. A longitudinal approach to the psychodynamics of imprisonment. *Journal of Social Work Practice*, Vol. 18, p. 315-336.

Biswanger, I. A.; et al. (2012): Return to drug use and overdose after release from prison: A qualitative study of risk and protective factors. *Addiction Science & Clinical Practice* 2012, 7/3.

Buikhuisen, W.; Hoekstra H. A. (1974): Factors related to Recidivism. *The British Journal of Criminology*, Vol. 14/1, p. 63-69.

Calcaterra, S.L. M.D., M.P.H. et al. (2014): The association between social stressors and drug use/hazardous drinking among former prison inmates. *Journal of Substance Abuse Treatment* 47, p. 41-49.

Charles, S. et al. (2013): The Wear and Tear of Daily Stressors on Mental Health. *Psychological Science*, Vol. 24/5, p. 733-741.

Cohen, J. (1988): *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum.

Creswell, J. W. (2007): *Qualitative inquiry and research design: Choosing among five approaches*. 2<sup>nd</sup> Edition. Thousand Oaks, CA: Sage.

DeLongis, A. et al. (1988): The Impact of Daily Stress on Health and Mood: Psychological and Social Resources as Mediators. *Journal of Personality and Social Psychology*, Vol. 54/3, p. 486-495.

Eckenrode, J. (1984): Impact of Chronic and Acute Stressors on Daily Reports of Mood. *Journal of Personality and Social Psychology*, Vol. 46/4, p. 907-918.

Field, Andy (2014): *Discovering Statistics. IBM SPSS Statistics*. 4<sup>th</sup> Edition. Los Angeles, London: Sage.

Folkman, S. et al. (1986): Dynamics of a Stressful Encounter: Cognitive Appraisal, Coping, and Encounter Outcomes. *Journal of Personality and Social Psychology*, Vol. 50/5, 902-1003.

Gideon, L. (2009): What Shall I do Now? Released Offenders' Experience for Supervision Upon Release. *International Journal of Offender Therapy and Comparative Criminology*. Vol. 53/1, p. 43-56.

Greenberg, D. F. (1977): Delinquency and the age structure of society. *Contemporary Crises*, Vol. 1, 189-223.

Gullone, E. et al. (2000): Coping styles and prison experience as predictors of psychological well-being in male prisoners. *Psychiatry, Psychology, and Law*, Vol.7, p.170-181.

Hanrahan, K. et al. (2005): Parole and revocation. Perspectives of young adult offenders. *The Prison Journal*, Vol. 85, p. 251-269.

Hansson, R. K.; Harris, A. J. R. (2000): Where should we intervene? Dynamic predictors of sexual offense recidivism. *Criminal Justice and Behavior*, Vol. 27, p. 2-35.

Harvard Health Publications (2011): Understanding the stress Response. Chronic activation of this survival mechanism impairs health. March 2011. [Online Access May 2017] <http://www.health.harvard.edu/staying-healthy/understanding-the-stress-response>

Hirschi, T. (2002) *Causes of Delinquency*. New Brunswick: Transaction publishers.

Lazarus, R. S. (1999): *Stress and emotion: A new synthesis*. New York: Springer.

Lazarus, R. S.; Folkman, S. (1984): *Stress Appraisal and Coping*. New York: Springer.

Lipton, D. S. (1995): *Effectiveness of treatment for drug abusers under criminal justice supervision*. Darby, PA: Diane.

Martin, S. S. et al. (1999): *Three year outcomes of therapeutic community treatment for drug-involved offenders in Delaware. From prison to work release to after-care*. *The Prison Journal*, Vol. 79/3, p. 294-320.

Morse, D. R. (1995): *Stress: Clarification of a Confused Concept*. *International Journal of Psychosomatics*, Vol. 42, p.4-24.

Morse, D. R. (1998): *Confronting existential anxiety: The ultimative stressor*. *Stress & Medicine*, Vol. 14, p. 109-119.

Pallant, Julie (2005): *SPSS Survival Manual. A step by step guide to data analysis using SPSS for Windows (Version 12)*. Crows Nest, Australia: Allen & Unwin.

Phillips. L. A. & Lindsay, M. (2011): *Prison to society: A mixed methods analysis of coping with reentry*. *International Journal of Offender Therapy and Comparative Criminology* 55, 136-154.

Pow, J. et al. (2016): *Threats to communion and agency mediate associations between stressor type and daily coping*. *Anxiety, Stress & Coping*, Vol. 29/6, p. 660-672.

Seal, D. W. et al. (2007): *A longitudinal, qualitative analysis of the context of substance use and sexual behavior among 18- to 29-year-old men after their release from prison*. *Social Science & Medicine*, Vol. 65, p. 2394-2406.

Seiter, R. P.; Kadela, K.R. (2003): *Prison Reentry. What Works, What Does Not, and What is Promising*. *Crime & Delinquency*, Vol. 49/3, p. 360-388.

Selye, H. (1936): *A syndrome produced by diverse nocuous agents*. *Nature*, 138/32.

Serido, J. et al. (2004): *Chronic Stressors and Daily Hassles: Unique and Interactive Relationships with Psychological Distress*. *Journal of Health and Social Behavior*, Vol. 45 (March), p. 17-33.

Shapland, J. et al. (2016): *Global Perspectives on Desistance. Reviewing what we know and looking to the future*. London; New York: Routledge.

Stone, A. A. & Neal, J. M. (1982): *Development of a methodology for assessing daily experiences*. In Baum, A. & Singer J. (Eds.): *Advances in environmental psychology: Environment and health* (Vol. 4, p. 49-83). New York, NY: Lawrence Erlbaum.

Stone, A. A. et al. (1991): *Measuring daily events and experiences: Methodological considerations*. *Journal of Personality*, Vol. 59, p. 575-607.

Tashakkori, A.; Teddlie, C. (2010): SAGE Handbook of Mixed Methods in Social & Behavioral Research. 2<sup>nd</sup> Edition. Thousand Oaks, California: Sage.

Toby, J. (1957): Social disorganization and stake in conformity. Complementary factors in the predatory behavior of hoodlums. *The Journal of Criminal Law, Criminology & Police Science*, Vol.48, p.12-17.

Travis, J.; Petersilia, J. (2001): Reentry Reconsidered. A New Look at an Old Question. *Crime and Delinquency*, Vol. 47/3, p. 291-313.

Travis, J (2005): *But They All Come Back. Facing the Challenges of Prisoner Reentry*. Washington, D.C.: Urban Institute.

Vasiljevic, Z. et al. 2017: Daily Assessments of Acute Dynamic Risk in Paroled Offenders. Prediction, Predictive Accuracy and Intervention Effect. *Psychiatry, Psychology and Law*, p. 1-15.

Vingerhoets, A. (1985): *Psychosocial Stress: An Experimental Approach*. Lisse, Switzerland: Swets & Zeitlinger.

Visher, C.A.; Travis, J. (2003): Transition from Prison to Community. Understanding Individual Pathways. *Annual Reviews Sociology*, Vol.29, p. 89-113.

Visher, C. (2004): *Returning Home. Understanding the Challenges of Prison Reentry. Maryland Pilot Study. Findings from Baltimore*. Washington D.C.: Urban Institute.

Walker, J.; Crawford, K. (2014): *Social Work and Human Development*. 4<sup>th</sup> Edition. London, Thousand Oaks i.e.: Learning Matters, Sage.

Western, B. et al (2015): Stress and Hardship after Prison. *AJS* Vol. 120/5, p. 1512-1547.

Zamble, E.; Poporino, F. (1984): Coping with imprisonment. *Canadian Journal of Criminology*, Vol. 26, p. 403-421.

Zamble, E.; Quinsey, V. L. (1997): *The criminal recidivism process*. Cambridge, UK: Cambridge University Press.

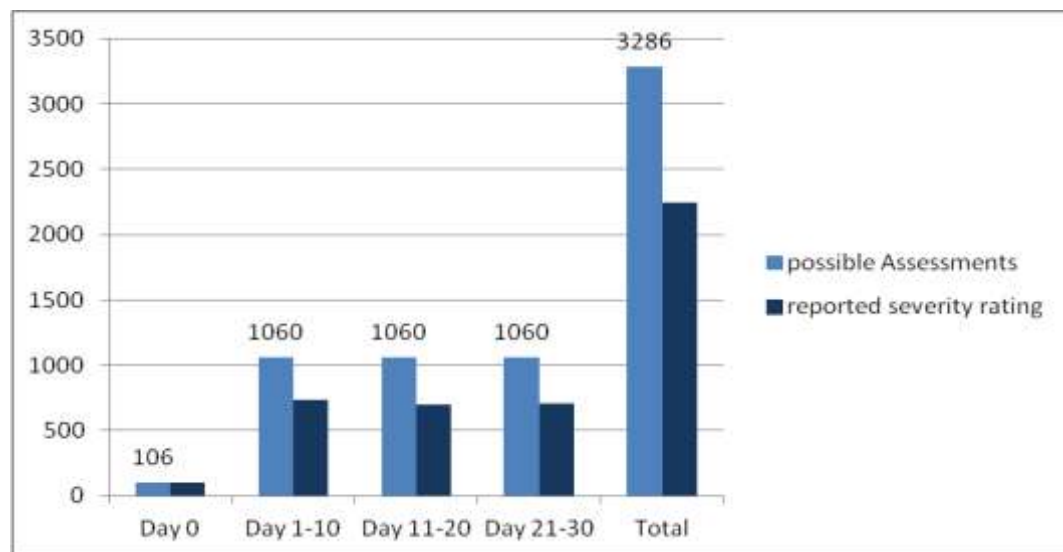
Zautra, A. J. (2003): *Emotions, stress, and health*. New York: Oxford University Press.

## APPENDIX

Appendix 1. Overall response rate of daily stressful events and severity ratings over the course of the study period.

	POSSIBLE ASSESSMENTS	DAILY STRESSFUL EVENTS	SEVERITY RATINGS
<b>DAY 0</b>	106 (100%)	101 (95%)	106 (100%)
<b>DAY 1-10</b>	1060 (100%)	737	731
<b>DAY 11-20</b>	1060 (100%)	702	700
<b>DAY 21-30</b>	1060 (100%)	709	708
<b>TOTAL</b>	3286 (100%)	2249	2240

Appendix 2. Overall response rate of all severity ratings over the course of the study period.



Appendix 3. Frequency (%) - severity ratings made in regards to specified stressors (social, psychological and physical) and number of times a rating of 1 to 9 (>0) and 0 (=0) was assigned by the participants (n=106)

	SPECIFIED STRESSORS	QUANTITATIVE RATINGS
<b>DAY 0</b>	36 (7%)	36 (7%) 31x>0 5x= 0
<b>DAY 1-10</b>	193 (38%)	187 (38%) 167x>0 20x=0
<b>DAY 11-20</b>	149 (30%)	147 (30%) 127x>0 20x=0
<b>DAY 21-30</b>	127 (25%)	126 (25%) 125x>0 20x=0
<b>TOTAL</b>	505 (100%)	496 (100%)