# Investigating The Effect of Interpersonal Emotion Regulation and Positive Affect on Momentary Resilience Using Experience Sampling

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#### Abstract

Worldwide, the numbers of experienced distress are increasing, this leads to further health problems, but also increases the future risk of developing pathologies. Even if resilience was detected as a psychological protective buffer against stress earlier, little is known about the factors that underlie resilience in daily life. Momentary resilience was therefore investigated using the experience sampling method (ESM). Over seven days, momentary resilience was measured ten times a day in terms of affective recovery. In order to gain more in-depth knowledge about momentary resilience in daily life, the effect of interpersonal emotion regulation (IER) was investigated on the affective recovery of positive affect (PA) and negative affect (NA). IER showed to have a significant positive effect on the recovery of PA, but not on the recovery of negative affect (NA). However, via self-assessment, participants indicated that they perceived a decreasing NA and increasing PA after using IER. Following the broaden-and-build theory of positive emotions, PA was additionally measured as an interaction effect on the use of IER strategies in affective recovery. Hereby, no effect could be measured. In summary, it can be concluded that IER has an important influence on the overcoming of adversity in everyday life. This could be confirmed especially for the recovery of PA. Since PA has been identified as being a predictor of access to the thought action repertoire earlier, a good basis for future research and interventions could be built.

Keywords: Momentary Resilience, Experience Sampling Method, Interpersonal Emotion Regulation, Positive Affect

## Momentary Resilience in Daily Life

According to the American Institute of Stress, in 2022, 73% of people reported suffering from stress, which effects their mental health (Patterson, 2022). Research shows that this can lead to physical and mental health problems and an increased risk of developing pathologies (Miao et al., 2020). However, the difference in how individuals respond to stress is highly intra-individual. Yet, resilience has been shown to be a factor influencing this individual difference (Van Der Werff et al., 2013). Thereby, resilience has become a central issue in many different areas in recent years. Although, the number of resilience definitions has multiplied within the last years, no standardized universal definition of resilience has been established yet (Herrman et al., 2011). The definition "resilience is an ability to resist, cope with, recover from, and succeed in the face of adverse life experiences" (Hartigh & Hill, 2022), can be referred to within the context of psychology, since it covers the three main studied concepts of resilience (Herrman et al., 2011). Firstly, resilience is claimed to be the ability to resist the negative effects of stressors, meaning that individuals maintain a healthy state even when experiencing a stressor (Davydov et al., 2010). Thus, the absence of psychopathology is an essential component. Secondly, bouncing back from stressful situations is often referred to as resilience too (Davydov et al., 2010). This is the process of returning to the mental state which existed prior to the encounter with the stressor. Lastly, resilience is seen as internal growth after exposure to stressors. This is the reintegration or coping process that can result in personal growth after experiencing adversity (Davydov et al., 2010). However, it has repeatedly been pointed out that resilience should be measured as an active process (Herrman et al., 2011). This is not only in accordance with Herrmann et al.'s (2011) description of resilience as a psychological process that entails bouncing back from adversity to one's previous mental state but also reflects one's individual capacity to handle stress (Herrman et al., 2011).

# **Experience Sampling**

So far, resilience has been measured mostly on a macro level by means of retrospective questionnaires (Myin-Germeys et al., 2018). This methodology is not only vulnerable to recall bias but also does not provide insight into everyday stress situations and how individuals cope with them. Alternatively, measuring resilience as an active process, the Experience Sampling Method (ESM) has proven to be a powerful tool for measuring micro-level contexts in individuals' everyday life (Myin-Germeys et al., 2018). For this purpose, smartphone apps, for example, are being used to collect data ten times per day for a week. Not only does this allow for a deeper understanding of the phenomena, but it also provides insights into the variability over time (Myin-Germeys et al., 2018). To date, the ESM has successfully measured that momentary resilience, i.e. the situational ability to respond to stress, has an influence on the development and change of symptoms shown by each individual (Kuranova et al., 2020). In contrast, little is known about the factors which influence individuals' differences in momentary resilience itself. Due to the fact that perceived stress correlates significantly with health outcomes (Kuranova et al., 2020), there is an urgent to need to further create a founded understanding for momentary resilience. Thus, knowing the underlying factors will allow for more targeted interventions aimed at preventing individuals from long-term psychological and physical harm in the future.

## **Positive Affect**

Although not yet at the micro level, factors which appear to have an impact on resilience have been identified. As one topic being related to resilience positive affect (PA) could be identified earlier. It was shown that PA leads to increased resilience (Kay, 2016). This means that, on the macrolevel it was shown that experienced PA in individuals correlates with higher overall resilience scores (Kay, 2016). Here, resilience can be described as the ability to buffer back, i.e., affective recovery. The broaden-and-build theory of positive emotions can be used to explain the micro level (Cohn et al., 2009). The theory states that affective recovery in terms of emotion regulation is more facile to implement for individuals who experience higher PA in terms of adversity. This is because PA causes the personal collection of coping mechanisms to be more accessible, which consequently enhances emotion regulation and thus the affective recovery (Cohn et al., 2009).

## **Emotion Regulation**

Emotion perception and control are directly related to one's own emotion regulation (ER). Prior research on psychopathologies has shown that differences in ER significantly account for individuals' differences in perceiving emotions (Kay, 2016). In general, ER can be defined "as the cognitive-behavioral process whereby individuals consciously and/or non-consciously adjust internal affective states to respond to environmental demands appropriately and thereby engender adaptive responses" (Poliizzi & Lynn, 2021). Moreover, ER can be differentiated into two subcategories. Firstly, intrapersonal ER, which involves individual cognitive, affective and behavioral strategies that follow adversity. And secondly, interpersonal ER (IER), which is about utilizing interaction with others that bolsters individuals to modulate their own feelings and thoughts (Poliizzi & Lynn, 2021). Further, ER strategies underlying both subcategories can be applied consciously or unconsciously, alone or combined, depending on the context and stimulus and nevertheless, individuals imprint and preference. However, ER must always be recognized as a multifaceted construct and continuum (Poliizzi & Lynn, 2021).

## **Interpersonal Emotion Regulation**

In contrast to intrapersonal ER, IER has received little research attention. Despite the fact, research has shown that individuals rarely deal with negative emotions on their own when being

exposed to the latter. Meanwhile, in the context of resilience, characteristics such as social support and social sharing have been examined (Zaki & Williams, 2013). Meanwhile, in Liu et al.'s (2021) ESM study on IER in daily life, it was demonstrated that almost all participants used IER strategies several times per day. Most of the time with the intention of being heard and receiving empathy thus indicating an emotion-oriented goal, rather than demanding direct solutions in terms of a problem-oriented goal (Liu et al., 2021). Given the fact that individuals engage in IER daily (Liu et al., 2021), it seems logical to investigate its effect on individuals' emotions and whether there is a link with momentary affective recovery and by that representing the concept of momentary resilience. Although long-term studies have indicated a significant positive relationship between the application of IER strategies and resilience, to date, no studies have investigated the effect of IER on momentary resilience (Zaki & Williams, 2013).

## **Current Research**

The current study aimed to investigate the role of PA and IER on momentary resilience by using ESM. Since ER has been proven to bolster momentary resilience and moreover it was found that most people engage in IER on a regular basis, it was hypothesized i) that in moments where IER strategies are applied the affective recovery of NA is increased, compared to moments where IER is not applied. Furthermore, in line with the broaden- and build theory of positive emotions it was hypothesized that ii) that in moments where IER strategies are applied the affective recovery of PA increases, compared to moments where IER is not applied. Additionally, it was further hypothesized that iii) in moments of stress, PA positively influences the application of IER strategies in daily life.

## Methods

## **Participants**

The participants for this study were recruited using a convenience sampling method. Personal acquaintances of the participating researchers were recruited in person and through private social media channels on Facebook, Instagram and WhatsApp. Inclusion criteria for the study included being 18 years or older and having a sufficient comprehension of English. Participants also had to have a working smartphone with an internet connection. No compensation was offered as a compensation for their time. However, in order to increase the compliance rate, they were given the opportunity to request a personalised report at the end of the study. The study was conducted under the guidelines of the local ethics committee of the University of Twente (230631).

# Procedure

# **Experience Sampling**

The experience sampling method was chosen to investigate affectice recovery as closely as possible in daily life. In order to collect the necessary data, participants were contacted via email one week prior to the start of the study to be informed about the general procedure. They were again emailed to download the Ethica App, through which the experience sampling questionnaires were distributed one day before the study began. The participants were then added to the study by means of an access code and had to fill in the informed consent form, the demographic data and the baseline questionnaires. Using the ESM technique, over a period of seven days, ten questionnaires were sent to the participants between eight o'clock am and eleven o'clock pm. The interval between questionnaires was 90 minutes, during which the questionnaires were sent at different times within this 90-minute timeframe to avoid establishing a fixed routine. Each questionnaire was available for 15 minutes before it expired and could not be completed retrospectively.

## Measures

# **Positive** Affect

To measure PA, a mean of the items' positive affect "Right now, I feel cheerful", "Right now, I feel satisfied", "Right now, I feel relaxed" was calculated. Answers to the items had to be given on a 7-Point-Likert scale. A mean of all items was then calculated for each completed questionnaire.

# Negative Affect

Furthermore, NA was measured by the items "I feel stressed", "I feel anxious", I feel irritable", "I feel lonely", and "I feel down". All items had to be answered on a 7-Point-Likert scale. Moreover, a mean from all items was calculated.

# Affective Recovery

Participants were questioned about the most stressful event that occurred between the previous and subsequent questionnaires. Perceived stress was assessed by the variable "This event was stressful/ not stressful", whereby answers had to be given on a bipolar-coded six-point scale, ranging from very unpleasant to very pleasant. A negative evaluation, ranging from minus three to minus one, was anticipated to be an indicator of the occurrence of a stressful event and thus considered for the analysis. Moreover, affective recovery was assessed by calculating a difference score between the overall affect at the moment named (t0) and the next assessment moment (t+1). More precisely, the value (t+1) was subtracted from t(0) to obtain the recovery value for each affect. While PA and NA were used as the t(0), (t+1) was represented according to the variable lagPA and lagNEA. The recovery value which then consisted of PA-lagPa was called RecoveryP indicating the difference in positive affect. NEA - lagNEA= RecoveryN indicated the difference in negative affect.

Moreover, by asking the participants "Have you shared any experiences or feelings with someone else? (personal, or via message, etc.)" the IER variable was measured. In the course of this item, the participants were given a dichotomous answer option including a yes or no to answer the question.

# Self-Assessment PA

Including research on self-assessment, the item "After sharing, I felt an increase in positive emotions" was included (SAPA). The participants were given a 7-Point-Likert scale to answer and were asked to rank their emotions on it. Using this, the variable BetterP was calculated. For this, all given responses were combined and differentiated into two groups. One group consisted of those who indicated that their PA had risen sharply after IER, represented by the answer options five to seven on the Likert scale. The contrasting second group represented those who did not perceive any increase in PA after IER. For the latter group answers with one to three points were taken into account. Since four points represented neither an increase nor a decrease, answers were excluded.

#### Self-Assessment NA

Further, a self-assessment of negative affect (SANA) was created. The participants were asked to rate their emotions "After sharing, I felt a decrease in negative emotions", using a 7-Point Likert- scale. By doing so the variable BetterN was calculated for which again all collected answers were divided into two groups. Again, one group represented a decrease in NA after IER, indicated by answers five to seven on the Likert scale. And the contrary group was formed, indicating no decrease in NA after IER. For these answers given ranging from one to three on the Likert scale

were included. Recurrently, answers indicating four points were excluded from the analysis, given that they represented neither an increase nor a decrease.

# **Data Analysis**

For the data analysis, the baseline questionnaire dataset was combined with the ESM data to bring together all variables of interest. R statistical software (Version 2023.03.1+446) was used for all analyses. To test all hypotheses, a multilevel logistic regression analysis was performed by employing the lme4 package (Bates et al., 2015). In order to test the momentary affective recovery, the linear mixed model was only applied to measurements in which participants reported that they have had a stressful experience. To specify the random effects in this model, the repeated measures of the participants were included, so that the participants were treated as a random intercept. In order to test the first hypothesis that the momentary negative affect decreased after engaging in IER, RecoveryN was treated as the dependent variable and IER and lagNEA were handled as the independent variables. Additionally, in terms of the second hypothesis, momentary RecoveryP was analyzed. Thus, RecoveryP was taken as the dependent variable and lagPA and IER as the independent variables. Lastly, within the multilevel model, an interaction analysis was performed. Whereas IER was treated as the independent variable, PA was handled as the interaction predictor variable on the dependent variable RecoveryP.

## Results

# **Demographics**

In total 103 participants were gathered this study. For the analysis, it was necessary to eliminate a total of 32 participants, because they did not agree to informed consent or did not meet the compliance rate by submitting less than seven measurements within seven days. Using the cutoff score of ten percent of all questionnaires, ensured having enough data for the analysis. In addition, three other participants were excluded because they did not experience a stressful event, within the seven days. Finally, this resulted in a total of 68 participants, with 40 women, 27 males and one non-binary person and a mean age of 29.92 (sd= 13.71). In total, the 68 participants gave 4599 measurements, resulting in a compliance rate of 92.51%. After excluding all measurements without perceived stress, a total of 713 measurements remained. More precisely, this means that within 15.5% of all submitted measurements experienced stress was indicated. In relation to the research topic of determining the impact of IER on affective recovery, 520 stressful events were not shared socially, while 193 were (Table 1). On the individual level per participant this means that while 52 (76.47%) of the of the 68 participants shared their stressful events, 16 (23.53%) did not. Overall, within seven days, each person shared an average of 2.775 events.

## Table 1

Measurements overview (N=68)

Total Times where stress was experienced

Questionaires 4599 713

IER	
Not shared	520
Shared	193

## **Momentary Negative Affect Recovery**

To test the first hypothesis the effect of IER on RecoveryN was tested. A significant effect was found for lagNEA (b= -.680; SE= .464; p < .001) but not for IER (b= -.024; SE= .101; p = .813). This, however, contradicts the participants' SANA, whereby 58.92% indicated they felt less NA after addressing their stressful experiences with someone.

#### **Momentary Positive Affect Recovery**

Subsequently, in terms of the second hypothesis that individuals experience more momentary positive affect after using IER, significant positive effects for lagPa (b= -.613; SE= .048; p < .001) and IER (b= .022; SE= .098; p= .026) were measured. These results also represent the participants' SAPA, since 83,74% reported an increase in PA after engaging in IER.

# **Moderation PA on IER**

Regarding the fourth hypothesis the interaction between IER and PA on RecoveryP was found to be non-significant (b = .018; SE = .057 p = .753).

# Discussion

The purpose of this thesis was to examine momentary resilience in daily life. In order to gain more knowledge about factors influencing momentary resilience, the effects of IER and PA were investigated. Hereby, momentary resilience is the process of returning from a mental state altered by adversity to the previous one. Therefore, momentary resilience was measured in terms of affective recovery. To observe the recovery process in the best possible way, ESM was used. While IER had no effect on the recovery of NA, a significant effect was measured for the recovery of PA. In addition, the participants stated in a self-assessment that the majority felt less NA and increased PA after IER. Furthermore, no significant effect could be measured for PA as a moderator for IER and subsequent recovery.

## PA and NA recovery

Even though positive effects have already been identified as important sub-areas of IER, such as social support, IER itself has received little research attention. Nevertheless, longitudinal studies have already revealed a link between IER and long-term resilience, which is why it was now investigated at the momentary level. More precisely, the affective recovery of NA and PA was the object of research. In total, 76.47% applied IER an average of 2.775 times within seven days, which underpins the high relevance of IER in everyday life. Contrary to expectations, the investigation of IER on the affective recovery of NA and PA only revealed a significant effect for PA. However, these results are not reflected in the participants' self-perception. More than half of them stated that they perceived a strong decrease in NA and a strong increase in PA after IER. Regarding momentary resilience, however, it is necessary to understand that NA and PA coexist, and that the recovery process should not be understood as replacing negative with positive emotions (Cohn et al., 2009). Additionally, when facing mild to even severe adversity, it has been shown that the presence of momentary PA, despite the stress experienced, has a significant positive relationship with mental health outcomes (Cohn et al., 2009). In terms of momentary resilience, this is also clearly reflected in the self-assessment, where it was measured that IER strongly led to the decrease of negative affect and the increase of PA. Even though no significant value could be measured for the recovery of NA, PA nevertheless increased when the effect was measured with implicit variables. These findings can be further substantiated when including the broaden-and-build theory of positive emotions, in which PA has proven to be an influential factor when it comes to facing and overcoming adversity (Cohn et al., 2009). For momentary resilience, the conclusion can be drawn that this effect could also be confirmed. Overall, the self-assessment scores explicitly show that IER strategies seem to have a great influence on affective recovery in stressful moments. Even if no significant effects could be measured, a decrease in terms of NA can be seen, which can be expected when comparing the values with the self-assessment. Even if the values are relatively low, a long-term relevance of IER in terms of momentary resilience is to be expected and accordingly also meaningful for the daily life of individuals. It is also to be expected that individuals who feel PA will continue to

improve their coping skills to overcome adversity and thus achieve an overall healthier mental health (Cohn et al., 2009). For implementation in everyday life and the future, it should therefore be considered that options for the application of IER strategies could be provided to support individuals further. This provides a good basis for future interventions, as it can be deduced that it is not necessary to completely decrease the NA of individuals. Instead, to be better protected against adversity, the focus can be placed on adding PA and thus better mental health outcomes can be predicted.

## **Moderation effect from PA on IER**

Following this, the hypothesis was that PA had a moderating effect on whether IER strategies were applied. It was assumed that individuals who experience PA are able to monitor the thought-action repertoire on a more complex level and are therefore more likely to utilize others to regulate themselves (Cohn et al., 2009). Contrary to expectations, no significant effect on the interaction could be measured even if the estimate indicates a very small positive effect, which would confirm the literature. This means that, even if IER strategies have been shown to have positive effects on recovery, no moderating effect was measured for PA leading to individuals using more IER strategies. Contrary to the literature, this still means that it has not been proven within this thesis that the experience of PA and the use of IER strategies are in a direct interactive relationship when investigating the affective recovery after adversity in daily life. Regarding the explanation, a differentiated view should be taken here. According to the broaden-and-build in theory of positive emotions, experienced PA leads to an improved application of healthy emotion regulation strategies, as the cognitive repertoire is more accessible compared to situations in which less PA is being felt (Cohn et al., 2009). No conclusions can be drawn from the analysis at this stage. We only monitored whether the

individuals used IER in its final stage, which then led to an improved recovery process. But not whether they thought about it or whether they had the opportunity to do so within the beep. If the possibility did not exist, PA could have influenced intrapersonal ER strategies instead. It would have been interesting to find out whether the people would have liked to apply IER strategies if the possibility had existed. This would have made it possible to measure the individual relevance of ER through IER in addition. Even if a minimal tendency was discernible, for everyday life, however, it can be deduced that other factors influencing the use of IER strategies should be investigated on in the future, as IER have been shown to influence the experience and regulation of individuals affect.

#### Limitations

Some limitations must be mentioned in order to put this paper into perspective. It should be noted that the items developed were derived from other literature, but no reliability and validity in relation to the topics of this paper were tested. Additionally, the sample has some limitations as well. Because the researchers used convenience sampling to select their participants, a bias in terms of diversity cannot be ruled out. Furthermore, there were issues with data collection, which may have influenced the data. Because of technical difficulties, not all participants received their initial questionnaires on the same day. Some people were also given access to an out-of-date questionnaire. These two factors could have contributed to a decrease in compliance rate even before the study began, as well as the fact that the barrier to participation in the study was too high. It should also be noted that participants were not compensated for their time spent in the study, which may have influenced compliance. In terms of data, a longer measurement period would be required to validate results. Additionally, the recovery values should be treated with caution because no situational factors were measured that would allow conclusions to be drawn about the situation in which the adversity arose and whether it would have been possible to share it. Finally, it should be mentioned that the self-assessment items represent a very subjective assessment and could, for example, have a strong correlation with individual self-reflection skills.

# **Future recommendation**

Accordingly, a variety of future recommendations can be suggested. In order to increase the quality, it would be useful to increase the number of days on which data is collected. Appropriate compensation should be added to increase the compliance rate to further increase the quantity and quality of the research. Furthermore, other factors should be controlled in further research when investigating IER and PA on momentary resilience. The addition of intrapersonal ER would be interesting in order to be able to determine correlations and manifestations in everyday life even more precisely. After that, it would be interesting to get more information about the adversity itself for example the situation accorded and what factors were included leading to this perceived adversity. It would also be interesting to find out when IER, as opposed to intrapersonal strategies, is used to apply adversity in everyday life and consequently how the recovery values depend on this.

## Conclusion

Overall, the study was able to uncover important aspects. It was proven that IER is a widespreaded strategy that is applied in daily life, hence confirms that individuals also use others to regulate their emotions in stressful everyday situations. It could be proven that especially concerning PA, the effect of IER on momentary resilience could be demonstrated. Moreover, it could be proven that IER does contribute to the improvement of PA recovery. However, increased PA scores do not contribute to individuals being more likely to use IER strategies in daily life. Especially the fact that the IER has a positive impact on affective recovery and thus momentary

resilience, builds a good basis for further research in order to gain more in depth knowledge of momentary resilience in daily life.

- Bates, D. M., Mächler, M., Bolker, B. M., & Walker, S. (2015a). Fitting Linear Mixed-Effects Models Usinglme4. *Journal of Statistical Software*, 67(1). https://doi.org/10.18637/jss.v067.i01
- Cohn, M., Fredrickson, B. L., Brown, S., Mikels, J. A., & Conway, A. (2009). Happiness unpacked: Positive emotions increase life satisfaction by building resilience. *Emotion*, 9(3), 361–368. https://doi.org/10.1037/a0015952
- Davydov, D. M., Stewart, R., Ritchie, K., & Chaudieu, I. (2010). Resilience and mental health. *Clinical Psychology Review*, *30*(5), 479–495. https://doi.org/10.1016/j.cpr.2010.03.003
- Herrman, H., Stewart, D. E., Diaz-Granados, N., Berger, E. L., Jackson, B. E., & Yuen, T. J.
  (2011). In Review What Is Resilience. *La Revue Canadienne De Psychiatrie*, 56(5).
  http://www2.viu.ca/resilience/documents/WhatisResilience.pdf
- Patterson, E. (2022, September 5). Important facts and statistics about stress: Prevalence, impact, & more. The Recovery Village Drug and Alcohol Rehab. https://www.therecoveryvillage.com/mental-health/stress/stress-statistics /#:~:text = According%20to %20T he%20American %20Institute,that%20impacts%20thei r%20 mental% 20health
- Kay, S. A. (2016). Emotion Regulation and Resilience: Overlooked Connections. *Industrial and Organizational Psychology*, 9(2), 411–415. https://doi.org/10.1017/iop.2016.31
- Polizzi, C. P., & Lynn, S. J. (2021). Regulating Emotionality to Manage Adversity: A Systematic Review of the Relation Between Emotion Regulation and Psychological Resilience. *Cognitive Therapy and Research*, 45(4), 577–597. https://doi.org/10.1007/s10608-020-10186-1

- Liu, D. D., Strube, M. J., & Thompson, R. J. (2021). Interpersonal Emotion Regulation: an Experience Sampling Study. *Affective Science*, 2(3), 273–288. https://doi.org/10.1007/s42761-021-00044-y
- Miao, Z., Wang, Y., & Sun, Z. S. (2020). The Relationships Between Stress, Mental Disorders, and Epigenetic Regulation of BDNF. *International Journal of Molecular Sciences*, 21(4), 1375. https://doi.org/10.3390/ijms21041375
- Myin-Germeys, I., Kasanova, Z., Vaessen, T., Vachon, H., Kirtley, O. J., Viechtbauer, W., & Reininghaus, U. (2018). Experience sampling methodology in mental health research: new insights and technical developments. *World Psychiatry*, *17*(2), 123–132. https://doi.org/10.1002/wps.20513
- Smith, B. W., Dalen, J., Wiggins, K. J., Tooley, E. M., Christopher, P. J., & Bernard, J. F.
  (2008b). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, *15*(3), 194–200.
  https://doi.org/10.1080/10705500802222972
- Tugade, M. M., & Fredrickson, B. L. (2004). Resilient Individuals Use Positive Emotions to Bounce Back From Negative Emotional Experiences. *Journal of Personality and Social Psychology*, 86(2), 320–333. https://doi.org/10.1037/0022-3514.86.2.320

Vaessen, T., Viechtbauer, W., Van Der Steen, Y., Gayer-Anderson, C., Kempton, M. J.,
Valmaggia, L., McGuire, P., Murray, R. M., Garety, P., Wykes, T., Morgan, C., Lataster,
T., Lataster, J., Collip, D., Hernaus, D., Kasanova, Z., Delespaul, P., Oorschot, M., Claes,
S., . . . Myin-Germeys, I. (2019). Recovery from daily-life stressors in early and chronic
psychosis. *Schizophrenia Research*, *213*, 32–39.
https://doi.org/10.1016/j.schres.2019.03.011

- Van Der Werff, S. J., Van Den Berg, S. M., Pannekoek, J. N., Elzinga, B. M., & Van Der Wee, N. J. (2013). Neuroimaging resilience to stress: a review. *Frontiers in Behavioral Neuroscience*, 7. https://doi.org/10.3389/fnbeh.2013.00039
- Zaki, J., & Williams, W. C. (2013). Interpersonal emotion regulation. *Emotion*, *13*(5), 803–810. https://doi.org/10.1037/a0033839