

University of Groningen

The Role of Emotional Experiences in Commitment Development in Internship Students

Kunnen, E. Saskia

Published in:
Identity

DOI:
[10.1080/15283488.2023.2235392](https://doi.org/10.1080/15283488.2023.2235392)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2023

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Kunnen, E. S. (2023). The Role of Emotional Experiences in Commitment Development in Internship Students. *Identity*, 23(4), 379-393. <https://doi.org/10.1080/15283488.2023.2235392>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.



Identity

An International Journal of Theory and Research

ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/hidn20>

The Role of Emotional Experiences in Commitment Development in Internship Students

E. Saskia Kunnen

To cite this article: E. Saskia Kunnen (2023) The Role of Emotional Experiences in Commitment Development in Internship Students, *Identity*, 23:4, 379-393, DOI: [10.1080/15283488.2023.2235392](https://doi.org/10.1080/15283488.2023.2235392)

To link to this article: <https://doi.org/10.1080/15283488.2023.2235392>



© 2023 The Author(s). Published with license by Taylor & Francis Group, LLC.



Published online: 19 Jul 2023.



Submit your article to this journal [↗](#)



Article views: 224




View related articles [↗](#)



View Crossmark data [↗](#)

The Role of Emotional Experiences in Commitment Development in Internship Students

E. Saskia Kunnen 

Department of Developmental Psychology, University of Groningen, Groningen, The Netherlands

ABSTRACT

In this study I address the relation between real-time experiences and vocational identity development in psychology students during their practical internship. By means of a multi-method approach I aimed to shed light on the role of salient emotional experiences in commitment development, and on the characteristics of these experiences. In a diary study internship students reported every week about their most relevant experience. For each student the most salient positive and negative emotional experience was selected. Most positive and negative experiences concerned competence-related issues. Salient emotional experiences were related to commitment change for a prolonged period of time. In line with the theoretical models, salient positive emotional experiences enhance the commitment strength, and salient negative emotional experiences reduce the strength. However, many experiences include different characteristics. In particular, negative emotional experiences are characterized by a diversity of both positive and negative characteristics.



KEYWORDS

Commitment development;
emotional experiences;
longitudinal research

Introduction

In this study I address the mechanisms in identity development in psychology students during their practical internship. I explore how real-time emotional experiences affect the development of the commitments with study and work. Theoretically, the conceptualization of identity in this study is based on the identity theory of Erikson (1968). Commitment development is one specific focus in the study of identity development that can be derived from Erikson's work. In this study I choose to define identity development as an individual's trajectory of commitment development in different domains of life. The concept of commitment refers to the presence of a stable set of goals, values, and beliefs that provide a direction, purpose, and meaning to life. It indicates an individual's "degree of personal investment the individual exhibits" (Marcia, 1966, p. 551). In its optimal form the process of identity development starts with exploration of possibilities, emotions, values and preferences of oneself and of the affordances and restrictions of the context (Bosma & Kunnen, 2001; Kroger & Marcia, 2011). During the exploration process individuals develop notions of what is important for them, what helps them to know who they are, and what they want to do in their working life, resulting in the formation of commitments.

In this study the focus is on internship students who are on the edge between study and work. The transition from study to work can be considered an important phase in vocational commitment development. It creates a context that invites or even forces exploration. For psychology students, a clinical internship is often an important and eye-opening experience in the development of their vocational commitment. Thus, the sample has specific and relevant

CONTACT E. Saskia Kunnen  e.s.kunnen@rug.nl  Department of Developmental Psychology, University of Groningen, Grote Kruisstraat 2/1 9712TS, Groningen, The Netherlands

© 2023 The Author(s). Published with license by Taylor & Francis Group, LLC.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

characteristics in common. We see the context as highly relevant in commitment development, and we think that knowledge of the context, such as the meaning of an internship in this specific group, is needed to understand the outcomes. Therefore, we prefer to study mechanisms in a specific context and group, rather than to study a mix of people from different unknown contexts. In the method section we provide a detailed description of the context of Dutch psychology masterstudents. Of course, the consequence is that conclusions are specific for this group, and to generalize our knowledge comparable studies should be done in different groups. An additional advantage is that knowledge of how experiences affect the identity development of this specific group, namely our own students, is highly relevant in improving our internship teaching programs.

Several studies (Brooks, 2014; Willis et al., 2019) have demonstrated that students' identities change over the course of a professional internship. The internship shapes the students' perspective on the work field and the vocational identity. However, only a few studies address the question of what mechanisms and factors during internships play a role in commitment development. Den Boer (2022) did an extensive study into the relation between personality and identity development during internships. The main conclusion is that contrary to the theoretical expectations, almost no relation was found. Based on this study Den Boer pleads for a shift toward a more individual and contextualized approach. This plea fits with a recent development in identity research: there is an increasing focus on the relation between real-time experiences and long-term identity development.

The journal "Identity: An International Journal of Theory and Research" (Kunnen & Sugimura, 2021) published two special issues that address this topic. Theoretically, the researchers in these two issues agree that identity development is a socially embedded process, and that everyday interactions are the site of and the mechanism for this process (De Ruiter & Gmelin, 2021; Hellinger & Schachter, 2021; Marshall et al., 2021; see also Postmes et al., 2006). This raises the question of how everyday interactions and experiences in clinical internships are important in vocational commitment development, and what types of experiences are especially relevant. The question of how to conceptualize and study the relation between different time scales, in this case between the real-time timescale and long-term development is elaborated in the dynamic systems approach. In short, this approach elaborates on how on the one hand existing long-term phenomena such as commitments affect and restrict real-time experiences, and in the other direction, these experiences may alter the long-term phenomena. A dynamic systems approach also helps to understand how individuals and context affect each other in real time. Individuals in their context can be seen as an interacting dynamic system. In a long chain of interactions over time, the individual affects the context and the context affects the individual, and in a next step the changed context affects the changed individual, etc. Several authors developed dynamic models describing the mechanisms behind of how commitments emerge from real-time interactions (Bosma & Kunnen, 2001; Klimstra et al., 2010; Lichtwarck-Aschoff et al., 2008; Van Der Gaag, 2017). Basically, the models assume that positive experiences support existing and emerging commitment, and negative experiences may challenge the commitments, and lead to a decrease in the strength of existing commitments and eventually change in commitment (Bosma & Kunnen, 2001).

Several studies found a relation between specific experiences and development of commitment. Positive experiences tend to be related to higher commitment, as compared to more neutral experiences (Van der Gaag et al., 2017). Experiences in which basic needs were fulfilled, are related to higher commitment scores, and experiences with frustrated need fulfillment to a lower commitment level, as compared to neutral experiences (Kunnen, 2022). With regard to the effect of negative experiences, the findings are inconsistent. Kunnen (2006) and Ten Hove et al. (2017) found a decrease in commitment following negative experiences, while Van der Gaag et al. (2017) found a slight increase. Van der Gaag et al. suggest that the effect of an experience on commitment may depend on the type of experience. For example, if someone experiences a failure that person may either loses faith, and maybe feels less committed, or becomes motivated to try harder and do better next time. In that second situation, a decrease in

commitment is not plausible. This observation makes clear that firstly, there is still much unknown about the characteristics of experiences that have impact on commitment development and secondly, that we have to focus on specific situations and on individual processes.

Getting insight in what makes real-time experiences relevant for commitment development and in fact, development in general, we ask what the motor is behind development. For this, we turn to emotion theory. In his emotion theory, Frijda (2007) states that emotions indicate what matters to an individual. Experiences that elicit strong emotions of for example fear, sadness or anger, are a trigger for action, a trigger to solve the emotion eliciting situation. In Frijda's theory, emotions are seen as an interacting system of physical perceptions, emotions, and cognitions, in which no simple cause or effect can be found. The finding that both valence and need fulfillments are relevant characteristics could be explained by this theory: valences directly concern emotions, and lack of need fulfillment elicits negative emotions. A consequence of Frijda's emotion theory would be that the emotional salience of experiences is important: especially experiences with a high emotional loading can be expected to have impact on commitment formation and change, as compared to experiences that are less emotionally loaded. The commitment development model of Bosma and Kunnen (2001) is based on the same assumptions: the authors argued that conflicts, defined as negative emotion arising experiences, are the motor of identity change. They define conflicts in identity relevant experiences as situations in which one's identity is at stake. As Bosma and Kunnen argue, not every negative experience can be expected to change commitment. In their model they assume that either repeated negative emotions or very strong negative emotions are expected to have impact.

The aim of this study is to increase the knowledge about the mechanisms behind the relation between real-time emotional experiences and long-term identity. I used a multi-method approach to shed light on the role of salient emotional experiences in commitment development during clinical internships, and on the characteristics of these experiences. The qualitative part of the study informs about the specific experiences that are relevant, and the quantitative part of the study shows how these experiences relate to quantitative commitment indicators. The unique combination allows for insight in the mechanisms and in the concrete experiences behind these mechanisms. In a diary study internship students reported every week about their most relevant experience. The first step was to describe the characteristics of these experiences. Next, for each student the most salient positive and negative emotional experience over the whole internship period was selected, and the characteristics of these experiences were compared to the other weekly reported experiences descriptively. This informs us about the kinds of experiences that do affect the students most. This knowledge is relevant both from a theoretical point of view, but also from a practical point of view in the guidance of internship students. Finally, by analyzing how these salient emotional experiences are related to commitment strength at the same time, and in the weeks after that experience I tried to shed light on the mechanisms that relate the salient experiences to longer term commitment development. This agenda resulted in the following research questions:

1. What are the characteristics of internship experiences that are considered relevant by the students?
2. What are the characteristics of the most salient emotional experiences?
3. How are commitment strength and salient emotional experiences related? We expect that compared to the overall level of commitment for that individual.
 - (a) The commitment strength is higher during a salient positive emotional experience.
 - (b) The commitment strength is lower during a salient negative emotional experience.
4. How are these salient emotional experiences related to commitment strength in the following weeks? We expect that
 - (a) The commitment strength will become higher following a positive emotional experience
 - (b) The commitment strength will become lower following a negative emotional experience.

5. Exploratively, it was investigated whether the group-based findings in question 4 and 5 hold for each individual. For individuals with a pattern of commitments scores that deviated from the results of question 4 and 5, the content of the commitments and the pattern of the trajectory were described and explored.

Method

Participants and their context

The participants were master's students who did a clinical internship in psychology (either neuropsychology, developmental psychology, clinical psychology or forensic psychology) at a general university in the Netherlands. In The Netherlands students choose a major (like psychology) before they enter college. After three years, when finishing their Bachelor, they choose a master specialization, such as developmental or clinical psychology. Most, but not all students in our sample continued with their Master directly after finishing their Bachelor. Officially the master's lasts one year, and the internship is the final part of the program. For most students the internship is the first practical experience as psychologist, although many have part-time jobs in a domain that is somehow relevant for their studies (like child care or care for elderly people). The data for this study were collected before the Covid pandemic. The (unpaid for) internship starts after six months of courses and lasted about 5 months (19–25 weeks), and took 3–4 days each week, in the final semester of their studies. Students have to apply for internships and are supervised by both external and internal supervisors. The purpose of these internships is to give students hands-on experience and expose them to the types of jobs for which their degrees intend to prepare them for the job market. In general, students start with attending intakes, assessments and treatments, and gradually do more and more of these activities under supervision and finally independently. In the last weeks of the internship most students perform the tasks of a novice psychologist. During the internships introduction meeting the students were asked to send a mail when they were interested in this study. Those who responded received additional information and an informed consent. Special care was taken to ensure that the author, who is also involved in teaching in this master period, was not aware of the identity of the participants. The participants themselves generated a four letter nickname that is used in this paper to refer to the individual participant. These nicknames are used in the paper. The author does not know the relation between real names and nicknames. Participants received 40 Euro after finishing the first part of the study including the diary, and 20 Euro if they also filled in follow-up questionnaires. The study was approved by the Ethical Committee Psychology of the University. Participants did their internships in 4 different cohorts between 2016 and 2018. In total 88 participants started in the study. For the present study only participants were included who filled in at least 19 weekly reports and who were between ages 22 and 29. This resulted in 55 participants, 6 men and 49 women, with a mean age of 23.4. Thirty-three participants were not included. One participant was excluded because she did not fit in the age range. Four participants dropped out because they failed their internship. Although this group was too small for significance testing, these participants all had lower levels of commitment strength at the start of the study. The remaining 28 participants (7 men and 21 women, age 23.8) filled in no or less than 19 diaries.

Design

At the start of each cohort the participants were asked to fill in a questionnaire about background characteristics and their expectations of the internship. These data are not used in this study. Thereafter, they received a short questionnaire every week during the entire (approximately) five month internship. In the first question the student was asked “Describe the most relevant experience of the past week that in some way was related to your internship.” The answer to this open question is named “the diary entry.” The diary entry was used to assess the

Table 1. The coding system with all characteristics to code the experiences.

Characteristic	Positive valence	Negative valence
Competence	Describes the experience of being competent, shows competence, describes positive feedback	Describes the experience of being incompetent, shows incompetence, describes negative feedback
Development	Describes the perception to have opportunities to learn and develop.	Describes the perception to have had no opportunities to learn and develop, or to experience stagnation
Confidence	Expresses self-confidence concerning the experience	Expresses self-doubt and uncertainty concerning the experience
Control/autonomy	Expresses experience of autonomy and control over one's work and actions	Expresses experience to have no autonomy and no possibility to choose
Relationship supervisor	Expresses feeling appreciated, describing positive interaction with supervisor.	Expresses not feeling appreciated, describing negative interactions with the supervisor.
Feeling of Fit	Expresses the feeling to fit in the internship and the organization	Expresses the feeling not to fit in the internship and the organization
Feelings about job and profession	Expresses proud, pleasure or enthusiasm about working as psychologist	Expresses disappointment, worries about working as psychologist
Chaos/work pressure	No positive valence	Expresses the feeling to be overwhelmed or overloaded by the work
Coping ¹	Describes problem focused actions to deal with problems in the internship	
Future as psychologist ¹	Describes thoughts and feelings about working as psychologist in the future.	

(¹ neutral, no positive or negative valence).

characteristics of each experience. The diary question was followed by eleven closed questions. Seven of these questions are used in this study. Two of these questions measured the level of positive and negative emotions about the experience. “Do you have positive feelings about this experience?” and “Do you have negative feelings about this experience?” The weekly commitment strength score is the average of the answer to five questions: “Do you think this kind of job suits you?,” “Do you feel confident about yourself?,” “Do you feel you are in the right place in this internship?,” “Do you doubt whether this kind of job suits you?” (reversely coded) and “To what extent do you identify yourself as a psychologist?” The selection of these five questions was based on definitions of commitment and on items stemming from two often used identity measurements: the U-MICS (Crocetti et al., 2008) and the GIDS (Bosma et al., 2012), and on the RECS-E, an instrument that was especially designed for micro-level assessment (Van der Gaag et al., 2016). To answer the closed questions the participants used a slider from 1 (not at all) till 100 (very much).

The questionnaire was sent by means of an e-mail with a link to a Qualtrics form. If a participant did not respond, an e-mail was sent by a research assistant, asking whether everything was okay and that we missed the response for that week. The selected participants filled in between 19 and 26 diaries. Following the internships more questionnaires were administered, but these are not included in this study.

To assess the characteristics of the diary entries, each entry was coded according to a coding system, developed by Kunnen and Krom (2017). This coding system includes 17 characteristics: seven characteristics that have a positive and a negative valence (e.g., competence and lack of competence), one characteristic with a negative valence only, and two characteristics are neutral. The interrater reliability between independent coders was sufficient (86% agreement) (Helfferich, 2017). For a complete description of the development and contents of the coding system, see Kunnen (2022). The system consists of 17 different codes, see Table 1.

Each experience was coded with regard to the presence (1) or absence (0) of each of the 17 characteristics. Each entry was coded by two people: the author and two master's students. If the coders did not agree, they discussed their reasons for the codes until consensus was reached. Experiences could receive zero, one, or multiple codes. Both the positive and the negative valence of a characteristic could be coded for the same experience. For example, a participant could experience success in administering a test (Competence positive), but also feel sad because of a negative evaluation of the supervisor (Competence negative).

Analyses

The question into the most common characteristics of the weekly reported experiences during the internships of all participants was answered by firstly computing per person the relative frequency (in percentages) of each of the 17 codes, and as a next step the average percentage and the range of each code over all participants.

To answer the question into the characteristics of the most salient emotional experiences I selected for each individual the experience with the highest score on the question for positive emotions (we call this a positive experience), and with the highest score for negative emotions (the negative experience). In case several experiences had the same rating, we selected the experience that had the lowest score for negative emotions in case of the positive experiences, and with the lowest score for positive emotions in case of the negative experience. Next, I computed the frequency distribution for the codes for the most salient positive and for the most salient negative experiences of all participants. As an illustration I gave examples of several typical experiences.

In a descriptive way I explored whether highly emotional experiences have different characteristics as compared to the characteristics of the other weekly reported experiences. The relative frequency of all coded characteristics in the total number of experiences, and in the highly emotional experiences. To avoid problems with nested data, for each participant the relative frequency (the percentage) of each code was used.

To test whether the commitment strength is higher during salient positive experiences, and lower during salient negative experience, we computed for each participant the average commitment strength over all measurements. We performed Anova to compare the average commitment scores, the commitment scores during the most salient positive and during the most salient negative emotional experience. To explore whether the findings hold for each individual we checked whether there are individuals whose results were in the opposite direction of the average group findings with regard to the difference between most salient positive and negative emotional experiences. We defined the individual outcome as deviant if the opposite outcomes of that individual concern differences in commitment scores of more than 0.5 standard deviation of the commitment scores of that individual. This implies that minor deviations are not considered as deviant and are not included in the description.

To analyze the change in commitment strength following a salient emotional experience we computed for each individual the average commitment score of the three experiences (covering a period of about three weeks) before and the three experiences after the highly emotional experience (also a period of about three weeks). To test hypothesis 4a and 4b we compared these averages over the whole group by means of a paired t-test for positive and negative experiences separately. An emotional experience was excluded from the analyses if there were less than three experiences before or after the emotional experience, and/or if there were less than three experiences between the positive and the negative emotional experience. The consequence was that for the positive experiences the data of 27 individuals were included, and for the negative experiences the data of 33 individuals. To explore whether the findings hold for each individual we checked whether there are individuals whose results were in the opposite direction of the average group findings with regard to the difference in score before and after these experiences. We defined the individual outcome as deviant if the opposite outcomes of that individual concern differences in commitment scores of more than 0.5 standard deviation of the commitment scores of that individual. This implies that only major deviations are considered. The reported experiences are described, starting with the code name of the participant, the diary number, the reported experience, and the coded characteristics. If irrelevant parts are left out this is indicated by "...". This part of the analysis is very explorative. The aim was to gain insight into the mechanisms that are behind these outcomes. There may be alternative mechanisms that are relevant only in a small majority of the population.

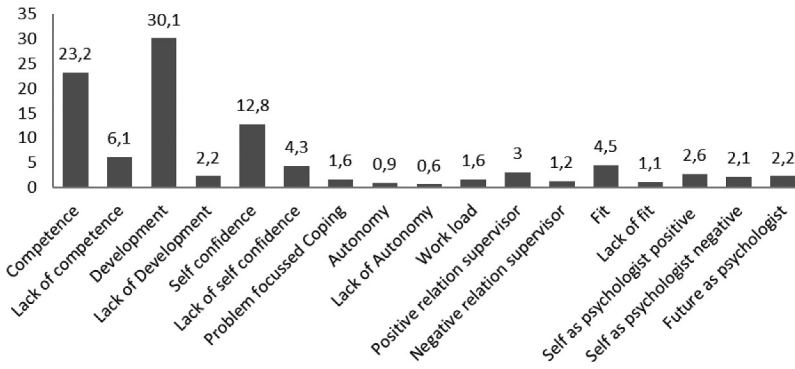


Figure 1. Distribution of characteristics over all weekly reported experiences in average percentages.

Results

The most frequent characteristics of the weekly reported internship experiences: The 55 participants generated in total 1210 diaries, and 1884 characteristics were coded in these diaries (Figure 1). Figure 1 shows the average of the percentage per individual, for each code.

The most frequently coded positive characteristics were Development and Competence, the most frequently coded negative characteristics were Lack of competence and Lack of self-confidence.

The frequencies of the characteristics of the most salient emotional experiences were given for the positive and negative emotional experiences separately. For the 55 salient positive experiences (one per individual) 99 characteristics were coded. Almost all these characteristics (91%) were positive. Only 5% was negative, and 4% was neutral (Figure 2).

Emotionally salient positive experiences were mainly characterized by performance-related characteristics: Competence (28 times), Self-confidence (22), and Development (24). These three characteristics often occurred in combination with each other. Competence is coded often in combination with Development (16 times) and Self-confidence (13 times). Typical examples of salient positive experiences are

Gebe-13. [participates in the guidance of group therapy] . . . I presented a session about diagnostics by myself. This was a really nice experience and it made me very enthusiastic. I enjoyed what I did, and because it went so well I got more confidence in my capacities. (competence, development, self-confidence)

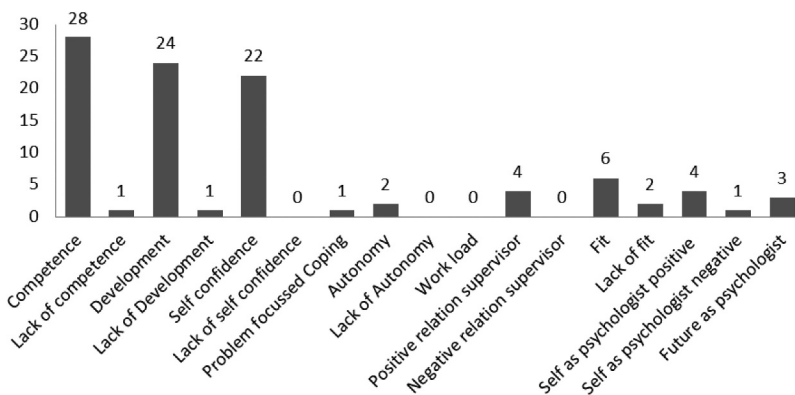


Figure 2. Distribution of characteristics over the most salient positive experiences in total number of codes.

Jaru-12, Last week I received a very good evaluation from my supervisor. Of course I was very happy about that. In addition she said that she would like me to stay in her team, and that made me even more happy. (competence, relation with supervisor)

For the 55 most salient negative experiences (one per individual) 76 characteristics were coded (Figure 3). A majority of these characteristics (51%) was negative, but about one third (34%) was positive. The rest (15%) was neutral.

The most frequently coded characteristic in salient negative experiences was lack of competence (13 times), in seven cases in combination with lack of self-confidence. In addition, work-load and the negative view on the self as psychologist were the most frequent negative codes in the salient negative experiences. Development was the only frequent positive code. Some typical examples are as follows:

Miad-10: Last week I received negative feedback, for the first time. My supervisor said I do not reflect enough on myself, and I should ask for feedback more frequently It came unexpected. . . . It made me feel uncertain. (Negative competence, negative self-confidence, negative relation)

Feelings of incompetence were sometimes related to events outside the internship.

Jaed-15: My boyfriend and I . . . had a serious row. I was sad and angry about that. This made I could not concentrate on my tasks, and I failed in finishing what I planned to finish. (lack of competence)

Positive development was a common characteristic (12 times) in negative experiences. Often it was combined with negative characteristics and formulated as a lesson learned from mistakes.

Jebe-7: During an evaluation with parents I discovered that I had made a calculation mistake in a WISC score. I checked everything, and found more calculation mistakes. It changed the outcome with only 1 point, but I felt very stupid. . . . I started to doubt myself. Can I handle this high work pressure? Normally I check everything twice, but I had no time. I think it is good for me that I have to deal with it, but it makes me doubt whether I did not make other stupid mistakes. I discussed this with my team, and they said that this happens sometimes and that it is best to double check everything. I will do that and try to trust that it goes well. (negative competence, positive development, lack of self-confidence, problem coping, work pressure)

Negative experiences referred relatively frequent to a negative view on self as psychologist (6 times) work load (6 times) and future as psychologist (4 times).

Nyfe-13: I do not feel at my place in this setting. I received an evaluation, and that had much impact. I do not know anymore what I want, but not this. I struggle to feel at home here I think I will learn more about myself than about the work as psychologist. (positive development, lack of fit, negative view on self as psychologist, future as psychologist)

Elha-11: I am confronted with the fact that it takes me so much time to write a report. I had several reports to write and I really was at odds with that. I did not finish them at the time they were needed. . . . I do not

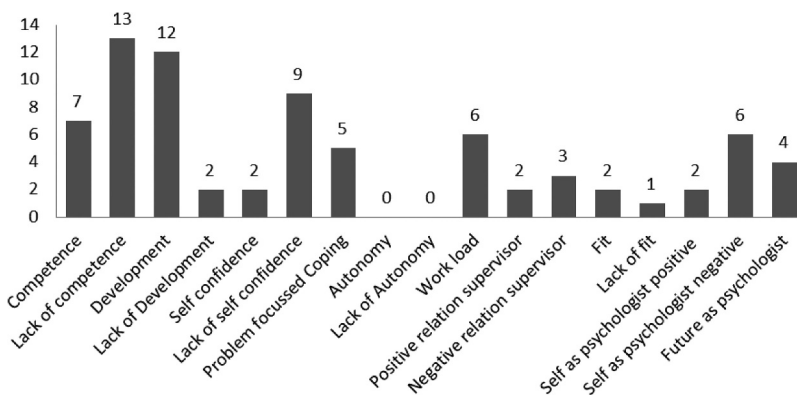


Figure 3. Distribution of characteristics over the most salient negative experiences in total number of codes.

know how to work faster. At the one hand it is understandable because I have to learn it, at the other hand I feel frustrated because I can do less. (lack of competence, lack of self-confidence, workload)

These citations of Jebe and Nyfe are good examples of the complexity of the experiences, including the possibility that a strongly negative experience also has positive components (development).

For some negative experiences no negative characteristics were coded at all.

Pefr-8: I will supervise a boy, who is bullied. . . This is challenging, because I have no idea how to handle this. Also the issue of bullying is not easy for me to handle. Next week I will meet the boy, and my supervisor intends to give me the lead. This is stressful and exciting, because I never had an interview with him being present. I am curious how this will go. (Positive competence, self-confidence, positive development)

The relative frequency of the characteristics in the weekly reported experiences, and of characteristics in the most salient positive and negative emotional experiences is presented in Table 2. Compared with the most frequent characteristics in the weekly experiences positive characteristics were more frequent in the salient positive experiences, and negative characteristics were more frequent in the salient negative emotional experiences. Some characteristics were more frequent in the salient emotional experiences than in the weekly experiences. In particular, the less frequently coded characteristics “workload,” “relation with the supervisor,” “fit,” and “future as psychologist” occurred more frequently in the salient emotional experiences. “Development” was the most frequently coded characteristic, but it occurred less frequent in the salient emotional experiences. The positive characteristic “Development” is also frequently observed in salient negative experiences, as demonstrated in the excerpt of Jebe described above.

The relation with commitment strength: Anova analysis showed a significant difference between the commitment scores over all weekly experiences, the commitment scores during the salient positive experiences and the commitment score during the salient negative experiences ($F(2.162) = 12.381$; $p = .000$). Post hoc analysis (Tukey) revealed that the commitment strength in the most salient negative emotional experiences is significantly lower as compared to the scores over all weekly experiences ($p = .007$) and to the scores of the positive emotional experiences ($p < .001$). The difference between the commitment score over all weekly experiences and the commitment score in the most salient positive emotional experiences is not significant. This confirms our hypothesis 3b, but not 3a.

Analysis per individual showed that 50 of the 55 participants had higher scores during the salient positive experience, and lower scores during the salient negative experience. For only one of the five exceptions, Reka, the difference between the salient negative and the salient positive commitment score was more than 0.5 standard deviation (computed over Reka’s weekly

Table 2. Percentage of characteristics in the weekly experiences and in the salient positive and negative experiences.

Characteristic	Weekly experiences	Salient positive experiences	Salient negative experiences
Competence	23.2	28.3	9.2
Lack of competence	6.1	1	17.1
Development	3.1	24.2	15.8
Lack of Development	2.2	1	2.6
Self-confidence	12.8	22.2	2.6
Lack of self-confidence	4.3	0	11.8
Problem focussed Coping	1.6	1	6.6
Autonomy	.9	2	0
Lack of Autonomy	.6	0	0
Work load	1.6	0	7.9
Positive relation supervisor	3.0	4	2.6
Negative relation supervisor	1.2	0	3.9
Fit	4.5	6.1	2.6
Lack of fit	1.1	2	1.3
Self as psychologist positive	2.6	4	2.6
Self as psychologist negative	2.1	1	7.9
Future as psychologist	2.2	3	5.3

For the weekly experiences the percentage per person is averaged.

experiences). Looking at the content of these experiences it turned out that Reka's positive experience was an exciting experience in which she felt competent and experiencing development, but also a lack of fit with her internship because the experience concerned work that is not typically psychologists' work and that made her doubt about her commitment as a psychologist.

Reka-3 Positive experience: For one day, I joined a social worker. During a family meeting a little boy disturbed the meeting, and I was asked to keep him busy. At the meantime, I heard the discussion about signs of safety. That was very interesting. I was allowed to make a report, and the social worker was very happy with me, thought I was good with children, and she wanted me to participate in the guidance of this family. This made me feel enthusiast, competent, recognized and valued. It also made me think whether the role of psychologist fits me, or maybe another function fits better.(competence, development, lack of fit)

The negative experience did not concern the internship directly, but the feedback from people outside the internship. The fact that her internal supervisor reassured her may have strengthened her commitment.

Reka-7 Negative experience: I had an intervision meeting [SK: with other clinical internship students at the University]. This was not a pleasant experience. My university teacher doubted whether I could write a clinical report, because I am not yet allowed to do many tasks myself. It felt as is she said that my internship was not good. While I feel it is going well and is interesting. Luckily next day I could discuss this with my supervisor and she could reassure me. (problem focused coping)

For the effect over time, the commitment strength turned out to be significantly higher in the three weeks after a salient positive emotional experience than it was in the weeks before, and significantly lower in the weeks after a salient negative emotional experience, as compared to the weeks before. This confirms our hypotheses 4a and 4b (Table 3).

Most of the participants had lower commitment scores in the three weeks following the salient negative experience, as compared to the weeks before the experience. However, 12 out of the 33 participants had higher scores following the salient negative experience. For six of them the difference was more than 0.5 standard deviation. This implies that the expected mechanism is found and is significant, but does not seem to be a universal mechanism. A closer look at the experiences related to the six deviant outcomes learned that there were only minor negative internship-related problems, and none of these had to do with competence. Two experiences received the code lack of development and described a lack of learning possibilities (Inre and Anpie), one experience seemed rather neutral (Elpa), one had a very good week with one minor issue (Heja), and two experiences (for Reka, see above, and Gebe) were about a negative experience outside the internship setting but the feelings about the internship were positive.

Elpa-17 Told that she participated in an interview where someone was told he had dementia. The man was shocked, but soon was joking again. (no coded characteristics)

Gebe-9 told that her relation unexpectedly broke down after two years. She was happy that she received understanding and support in her internship setting (positive fit)

Inre-8 told that all clients that day had turned down their appointment, so that she had prepared the meetings in vain, and she had nothing interesting to do. (lack of development, negative self as psychologist)

Anpie-4 told that she expected to have less possibilities to do intakes because of the arrival of another colleague. She expects that this will decrease her possibilities to learn new skills (lack of development)

Table 3. Average commitment before and after the salient emotional experiences.

Negative emotional experience (<i>n</i> = 33)					Positive emotional experience (<i>n</i> = 27)				
Before	After	t	Df	p-value	Before	After	t	Df	p-value
70.0	67.6	1.695	32	0.05	71.2	74.7	-1.982	26	0.03

Heja-13 told that she successfully worked independently. She had her evaluation this week which was very positive and she felt good. Also she had a confrontation with a colleague, and although they had good contact afterward, this throws a shadow on a good week.

With regard to the salient positive experiences, most of the 27 participants had higher commitment scores following the salient positive experience, but seven had lower commitment scores. For three participants the commitment level was more than 0.5 standard deviation lower than in the weeks before the experience. For one of these, Sujo, the positive experience expressed positivity (coded as development and autonomy), and the decrease following the experience seemed to be caused by negative experiences in the following weeks where she experienced lack of competence and lack of self-confidence. To a lesser extent this was the case for the two others (Hama and Mawi) as well. Their positive experience seemed positive indeed (codes competence, development, fit, coping), and following experiences are a mix of some positive (autonomy and development), but mainly neutral (coping) and negative (workload, lack of self-confidence, lack of competence) codes.

Discussion

Overall, the internship students described mainly positive experiences, and most experiences concerned competence-related issues. The most frequently coded positive characteristics were Development and Competence, the most frequently coded negative characteristics were Lack of competence and Lack of self-confidence. Development referred in almost all experiences to learning new skills, or in a negative form, the absence of the possibility to learn. More than 75% of the characteristics of the weekly experiences referred in some way to competence and performance. Of course, in a first real confrontation with the aimed work setting, it makes sense that students are focused on learning and developing their competence. However, in a comparable diary study with novice nurses in their first job (Ten Hoeve et al., 2018) it was found that for novice nurses the most frequent characteristic experience referred to relatedness, while the competence-related characteristics accounted for 32%. In particular, experiences with colleagues and supervisors were frequent in this study, while in our study almost no experiences reported colleagues, and only a few were about the supervisor. This suggests that it strongly depends on specific characteristics of settings and groups what types of experience matter most, and it confirms our initial assumption that to get a good picture of specific patterns it is important to study different specific groups. It might well be, for example, that in a later stage in the career of these psychologists, different types of experience might be more important. This may reveal interesting perspective on the dynamics that would be lost when studying taking broad and mixed samples.

Overall, the salient positive experiences had almost exclusively positive characteristics, but only about half of characteristics of the salient negative experiences were negative. Thus, even in negative emotional situations the participants saw positive aspects. Salient emotional positive experiences were mainly characterized by performance-related characteristics. Salient negative experiences showed more diversity. They were often characterized by both positive and negative competence-related characteristics. Lack of competence, lack of self-confidence, and also positive development were the most common characteristics. In addition, non-competence related characteristics that were less frequently found in the weekly experiences, namely “work-load,” “the future as psychologist” and “negative view on the self as psychologist” were relatively more often found in the negative experiences. Overall, the weekly experiences and the salient positive experiences seemed less diverse than the negative experiences. It may be that positive perceptions of oneself as psychologist and the future as a psychologist are “expected” after four years of study, and experiences with these characteristics are therefore less salient. Negative experiences in this domain however may be a harsh confrontation with the possibility that their future aims are less attractive or well suited than expected during all those years.

Comparing the commitment strength in salient positive and negative experiences showed that the commitment strength is significantly lower in salient negative experiences, as compared to the weekly experiences and the salient positive experiences. Hypothesis 3b is thus confirmed. The salient positive experiences do not differ significantly from the overall experiences, so hypothesis 3a is rejected. An explanation for the absence of the expected difference between the salient positive and the weekly experiences may be that the weekly experiences were mainly positive. For 90% of all participants the commitment score during the salient positive experience was higher than during the salient negative experience. This suggests that the positive relation between emotional experiences and commitment strength is rather general over the population. One case was clearly deviant. A really positive experience, relevant for the internship, was accompanied by a commitment score that was more than one standard deviation lower than the average commitment. In this specific case the salient positive experience concerned an experience with an activity that was successful and pleasant, but that was an activity belonging to another work field. This is interesting, because in our models and previous research we assumed that only negative experiences may lower the commitment, but also that especially salient negative experiences have the power to change the commitments (Bosma & Kunnen, 2001; Kunnen, 2006). In this case a salient positive emotional experience reduces the existing commitment. It may trigger an increase in exploration in breadth, and even reconsideration of the commitment. Exploration in breadth, and reconsideration, in group studies is often associated with less optimal identity development (see for example Crocetti et al., 2009), but this case shows that it could be the starting point for positive identity development resulting in a new commitment in another field of work.

The hypotheses that commitment strength would increase following a salient positive experience (4a) and decrease following a salient negative experience (4b), were both confirmed. This means that salient emotional experiences have an enduring effect, of at least three weeks, on the commitment strength. A minority of about 33% showed a relation between salient emotional experiences and commitment strength that was in contradiction with the overall pattern. To gain insight into individual differences, these experiences were analyzed in more detail with a focus on examples of alternative mechanisms, demonstrating whether and how salient positive experiences do not necessarily strengthen the commitment, and negative experiences do not necessarily lower the commitment strength. In the deviant pattern following the negative experiences it turned out that overall, the negative experiences were not so negative at all, at least not with regard to the internship. The positive experiences that showed a deviant pattern were positive experiences indeed, but negative experiences following the salient positive emotional experience seemed to play a role. Theoretically, it is interesting that this happened only three times. This suggests that salient emotional experiences were not easily overruled by new negative experiences in the following weeks. Thus, overall, these salient emotional experiences indeed had an enduring impact on the commitment strength.

In general, exploring the deviant cases in detail seemed to be a useful approach, that helped to get more insight into the different factors and mechanisms that play a role in the process under study, and it can demonstrate that mechanisms found in group research do not always hold on the individual level.

Limitations and future research: This study has a limited number of participants. In particular, the n for the comparison between commitment strength before and after salient experiences is small. This is understandable, because diary research and coding are intensive. Nevertheless, future studies with more participants are needed to confirm (or reject) the present findings.

A second limitation is that I focused on separate characteristics. Most experiences are characterized by compilations of characteristics. Some occur together frequently (positive competence and self-confidence) but other combinations are very idiosyncratic. It may be good to attempt to find a more holistic way to describe and classify the different experiences. Related to this point, the coded characteristics only reflect part of the interesting characteristics of the diaries. One way to approach the experiences in a more holistic way could be to analyze them from a narrative identity approach (McLean et al., 2022). For example, different types of exploratory processing and self-event

connections are visible: the students clearly differ in the degree to which they are engaged in reflective processes of analyzing and exploring the meaning of events, and in their explicit references to aspects of the self that are linked to the experience they tell about.

As explained in the introduction, I have deliberately chosen for a specific group of participants. This is a strength and a limitation at the same time. It implies that the conclusions hold only for this group, for psychology students doing their clinical internship at one specific university. The advantage of the specific sample is that it was possible to relate the outcomes to the conditions of this group of students. As discussed above, a comparable study has been done in a different group, namely novice nurses. Comparison of these studies revealed interesting differences. To understand the way in which context plays a role in commitment development, it is important to carry out comparable studies with different groups, to have good knowledge of these contexts in order to relate differences between studies to differences in context. A question that is still open is whether different groups only differ in the frequency of salient experiences, or that they also differ in the general mechanisms. Theoretically, this seems less plausible. For future research, a hypothesis could be that the effect of positive and negative experiences on commitment may be comparable with our findings, but that the characteristics of what a positive and a negative experience is, differ between groups.

Conclusion

Commitment development during clinical internships seems to be affected by salient emotional experiences for a prolonged period of time. Most of these experiences concern competence-related issues. In line with the theoretical models, salient positive emotional experiences typically enhance the commitment strength, and salient negative emotional experiences reduce the strength. However, many experiences include different characteristics. In particular, negative emotional experiences are characterized by a diversity of both positive and negative characteristics. Although most salient experiences are related to competence issues, there is a huge diversity in the composition of the characteristics. In case of atypical relations between the positive and negative characteristics and changes in commitment strength analysis of these characteristics may help to understand the mechanisms resulting in the atypical change.

Acknowledgments

The research was supported by a grant of the collaborative research project psychology. The collection of the data in this study was the result of a joint effort of Toon Kuppens, Sascha Krom and the author.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

E. Saskia Kunnen  <http://orcid.org/0000-0002-7876-0750>

Data sharing

Because the original data contain references to persons the data cannot yet be made publicly available.

References

- Bosma, H. A., & Kunnen, E. S. (2001). Determinants and mechanisms in ego identity development: A review and synthesis. *Developmental Review, 21*(1), 39–66. <https://doi.org/10.1006/drev.2000.0514>
- Bosma, H. A., Kunnen, E. S., & van der Gaag, M. A. E. (2012). *GIDS, Groninger Identity Development Scale: revisie 2012: handleiding*. Heymans Institute, University of Groningen.
- Brooks, C. F. (2014). Performed identity and community among college student interns preparing for work. *Journal of Education for Business, 89*(3), 165–170. <https://doi.org/10.1080/08832323.2013.801333>
- Crocetti, E., Klimstra, T., Keijsers, L., Hale, W., & Meeus, W. (2009). Anxiety trajectories and identity development in adolescence: a five-wave longitudinal study. *Journal of Youth and Adolescence, 38*, 839–849. <https://doi.org/10.1007/s10964-008-9302-y>
- Crocetti, E., Rubini, M., & Meeus, W. J. (2008). Capturing the dynamics of identity formation in various ethnic groups: Development and validation of a three-dimensional model. *Journal of Adolescence, 31*(2), 207–222. <https://doi.org/10.1016/j.adolescence.2007.09.002>
- Den Boer, L. (2022). *Personality and identity development during the transition to working life*. Dissertation Tilburg University. https://pure.uvt.nl/ws/portalfiles/portal/59092420/den_Boer_Personality_16_12_2021.pdf
- De Ruiter, N. M. P., & Gmelin, J.-O. H. (2021). What is real about “real time” anyway? A proposal for a pluralistic approach to studying identity processes across different timescales. *Identity: An International Journal of Theory and Research, 21*(4), 289–308. <https://doi.org/10.1080/15283488.2021.1969937>
- Erikson, E. H. (1968). *Identity: Youth and crisis*. Norton.
- Frijda, N. H. (2007). *The laws of emotion*. Lawrence Erlbaum Associates Publishers.
- Helfferich, S. (2017). Identity development of psychology students during the internship [Master thesis]. Developmental Psychology, University of Groningen.
- Hellinger, R., & Schachter, E. (2021). Tracking real-time changes in configurating identity elements in a life-story interview: An exploratory case study. *Identity: An International Journal of Theory and Research, 21*(4), 341–357. <https://doi.org/10.1080/15283488.2021.1977131>
- Klimstra, T. A., Hale, W. W., Raaijmakers, Q. W., Branje, S. J. T., & Meeus, W. J. (2010). Identity formation in adolescence: Change or stability? *Journal of Youth and Adolescence, 39*(2), 150–162. <https://doi.org/10.1007/s10964-009-9401-4>
- Kroger, J., & Marcia, J. E. (2011). The identity statuses: origins, meanings, and interpretations. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 31–53). Springer New York. https://doi.org/10.1007/978-1-4419-7988-9_2
- Kunnen, E. S. (2006). Are conflicts the motor in identity change? *Identity, 6*(2). https://doi.org/10.1207/s1532706xid0602_3
- Kunnen, E. S. (2022). The relation between vocational commitment and need fulfillment in real time experiences in clinical internships. *Identity, 22*(1), 6–16. <https://doi.org/10.1080/15283488.2021.1932899>
- Kunnen, E. S., & Krom, S. T. (2017). The development of an academic and professional identity among psychology students from different socio-economic backgrounds. <https://www.rug.nl/staff/e.s.kunnen/research/publications.html>.
- Kunnen, S., & Sugimura, K. Real-time identity processes: Theory and methods. (2021). *Identity: An International Journal of Theory and Research, 21*(4), 271–274. <https://doi.org/10.1080/15283488.2021.1985845>
- Lichtwarck-Aschoff, A., van Geert, P., Bosma, H., & Kunnen, S. (2008). Time and identity: A framework for research and theory formation. *Developmental Review, 28*(3), 370–400. <https://doi.org/10.1016/j.dr.2008.04.001>
- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology, 3*(5), 118–133. <https://doi.org/10.1037/h0023281>
- Marshall, S. K., Botia, L. A., Chiang, M. M.-C., Domene, J. F., Noel, M., Pradhan, K., & Young, R. A. (2021). Using contextual action theory and action-project method to study real-time identity. *Identity: An International Journal of Theory and Research, 21*(4), 309–323. <https://doi.org/10.1080/15283488.2021.1960166>
- McLean, K. C., Dunlap, D., Jennings, S. C., Litvitskiy, N. S., & Lilgendahl, J. P. (2022). Stability and change in autobiographical reasoning: A 4-year longitudinal study of narrative identity development. *Journal of Personality, 90*(3), 343–356. <https://doi.org/10.1111/jopy.12669>
- Postmes, T., Baray, G., Haslam, S. A., Morton, T. A., & Swaab, R. I. (2006). The dynamics of personal and social identity formation. In T. Postmes & J. Jetten (Eds.), *Individuality and the group: Advances in social identity* (pp. 215–236). Sage Publications, Inc. <https://doi.org/10.4135/9781446211946.n12>
- Ten Hoeve, Y., Brouwer, J., Roodbol, P. F., & Kunnen, E. S. (2017). The importance of contextual, relational and cognitive factors for novice nurses’ emotional state and affective commitment to the profession. A multilevel study. *Journal of Advanced Nursing, 74*(9), 2082–2093. <https://doi.org/10.1111/jan.13709>
- Ten Hoeve, Y., Kunnen, E. S., Brouwer, J., & Roodbol, P. F. (2018). The voice of nurses: Novice nurses’ first experiences in a clinical setting. A longitudinal diary study. *Journal of Clinical Nursing, 27*(7–8), e1612–e1626. <https://doi.org/10.1111/jocn.14307>

- Van Der Gaag, M. A. E. (2017). Understanding Processes of Identity Development and Career Transitions [PhD thesis]. University of Groningen. https://pure.rug.nl/ws/portalfiles/portal/51264115/Complete_thesis.pdf
- Van der Gaag, M. A. E., Albers, C. J., & Kunnen, E. S. (2017). Micro-level mechanisms of identity development: The role of emotional experiences in commitment development. *Developmental Psychology*, 53(11). <https://doi.org/10.1037/dev0000336>
- Van der Gaag, M. A. E., de Ruiter, N. M. P., & Kunnen, E. S. (2016). Micro-level processes of identity development: Intra-individual relations between commitment and exploration. *Journal of Adolescence*, 47, 38–47. <https://doi.org/10.1016/j.adolescence.2015.11.007>
- Willis, T. Y., Wick, D., Han, T. M., Rivera, J., & Doran, J. K. (2019). “If I did it over there, I can do it here”: U.S. Latinx social work students in costa rican service placements deepening their professional identity and skills. *Journal of Social Work Education*, 55(4), 710–723. <https://doi.org/10.1080/10437797.2019.1611513>