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# **Females' Perceptions and Stress in IT Education: A Person-Environment Fit and Coping Perspective on Staying In or Turning Away From IT Majors**

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## **ABSTRACT**

The underrepresentation of women in information technology has been a much-discussed issue in information systems research and practice for years. Although few women see a personal fit with an IT career and explicitly choose this career choice, most of them experience barriers and stress at different career stages. A serious consequence is that women abandon their information technology careers and turn away from the IT domain. Our study focuses on the stress experienced in early career stages. We conduct a qualitative study with 31 female IT students using guided retrospective introspection. We examine young women's process in responding to stressors during higher education. Our study identifies stressors young women face early in their IT careers during higher education, examines their impact on women's perceived fit with an IT career, and illustrates the resulting career outcomes. We contribute to IS research by identifying patterns and proposing a theorized process. We also discuss implications for practice and the need for future research.

**Keywords:** Careers, Gender issues, IT education, Higher education, Student perceptions

## **1. INTRODUCTION**

Organizations have been trying to increase gender diversity in the information technology (IT) workforce for years. However, women remain significantly underrepresented in the IT workforce (Richardson & Bissel, 2019). In the United States, for example, only 22.6% of the high-tech workforce is female, which has changed little over the past two decades (U.S. Equal Employment Opportunity Commission, 2024). Motivations for increased diversity and equity include a better performance of gender-diverse teams (Hoogendoorn et al., 2013) and tapping into an important talent pool to address the growing IT skills

shortage (Panko, 2008; Riemenschneider et al., 2009). Accordingly, the underrepresentation of women in IT is an important and ongoing discussion among information systems (IS) researchers and practitioners (Gorbacheva et al., 2019) that should be considered from an educational and organizational perspective (Ahuja, 2002): Young women most often make their first IT career choice during higher education, such as university. In this context, existing IS research mainly focuses on challenges related to attracting women to IT careers (e.g., Clayton et al., 2012), retaining them in the organization (e.g., Trauth et al., 2009), and advancing their careers (e.g., Armstrong et al., 2018). At the same time, several studies

provide clear findings about the negative aspects of the IT profession. For example, female IT professionals experience barriers and stress (Gallivan, 2004). The serious consequences of such occurrences are that many women abandon their IT careers and turn away from working in the IT field (Armstrong et al., 2015).

In contrast, less attention and emphasis has been paid in the literature to the challenges that young women face early in their IT careers, such as during IT higher education. However, this deserves more careful attention as the choice of an IT major represents an early threshold in entering an IT career (Ahuja, 2002; Frieze & Quesenberry, 2019). Young women first explore their fit with an IT career based on their skills, preferences, and interests, after which they make a conscious choice. The fact that a certain percentage of young women drop out of IT programs before graduation suggests that relevant factors challenge them early in their careers. The period of higher education is most often characterized by stressful situations that students have to cope with (Abouserie, 1994). Therefore, it is important to understand the stressors for women in higher education and how they affect their perceptions of IT career fit.

We utilize the person-environment fit model (Edwards et al., 2006), which explains one's perception of fit based on the congruence of individual and environmental characteristics, and the transactional model of stress (Lazarus & Folkman, 1984), which illustrates one's response to stressful events. Drawing on previous research on students' perceptions of fit and coping during higher education (Etzet & Nagy, 2016; Feldman et al., 1999), we use an exploratory study in the form of narrative interviews with 31 female IT students to gain a holistic view of specific aspects related to young women in IT careers. We identify several stressors that lead to stress in IT higher education and categorize them. We also examine how young women perceive and cope with these stressors. Our approach and findings contribute to IS research by highlighting the importance of stressors for women in early IT careers. Next, we provide some research background on women's career development in IT, person-environment fit, and the transactional model of stress as theoretical foundations for our research. We then explain our methodological approach and research findings and derive a theory-combining model and distinct patterns. Several theoretical contributions and practical implications complete our research.

## 2. RESEARCH BACKGROUND

Traditionally, women's IT careers follow a course of three successive stages, namely, IT career choice, IT career persistence, and IT career advancement. In order to show how fit perceptions and stress affect women's careers, we first explain the relevant research background on women's IT careers, person-environment fit perceptions, and the transactional model of stress.

### 2.1 IT Career Stages of Females

The study of women's IT careers is a recurring theme in research on the IT workforce in the IS discipline (e.g., Baroudi & Igbaria, 1994; Joseph et al., 2015; Reid et al., 2010; Truman & Baroudi, 1994). Individual differences, including gender factors, typically influence and challenge IT careers (Trauth et al., 2009). In the context of women pursuing IT careers,

previous research has identified three main stages (Ahuja, 2002):

**Career choice in IT.** The research focuses on women's decision to pursue an IT career, often made during higher education. Previous literature examines the determinants and challenges associated with stimulating young women's interest in an IT career (Clayton et al., 2012), encouraging their enrollment in IT programs (Choudhury et al., 2010), and recruiting them after graduation (Adya & Kaiser, 2005).

**Career persistence in IT.** With a focus on the long-term retention of women in IT careers, the research examines the challenges associated with women's daily work in the IT domain (Armstrong et al., 2012; Riemenschneider et al., 2006) and the phenomenon of IT turnover (Armstrong et al., 2015; Joseph et al., 2015). This describes the complex situation in which women leave their jobs in the IT domain and turn to work in another functional domain.

**Career advancement in IT.** Research focuses on women's goals to develop their careers and advance in their professions. Both challenging and supportive factors related to women's career motivation, effort, and success are addressed in previous studies (Armstrong et al., 2018; Armstrong et al., 2007).

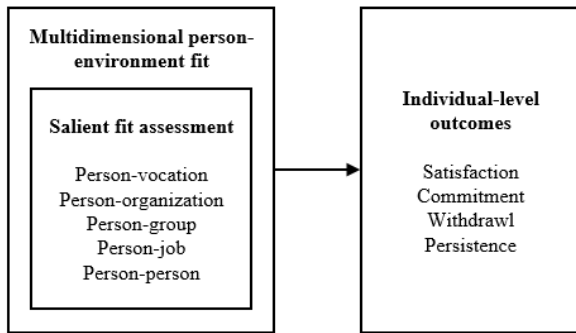
As the proportion of women in IT decreases with each career stage, the literature calls for a deeper understanding of the determinants of women's IT careers (Gorbacheva et al., 2019; Trauth, 2013). Recent studies responding to this call increasingly address the various challenges women face in their careers and examine different interventions for organizations (Annabi & Lebovitz, 2018; Armstrong et al., 2018). However, these primarily focus on challenges and interventions affecting women in the stages of career persistence and advancement. Surprisingly, the first stage, women's career choice, receives less attention and emphasis. This stage is obviously important as it represents the beginning of an IT career, which is most often initiated by choosing an IT major in higher education (Ahuja, 2002; Frieze & Quesenberry, 2019). The choice of major and career path is conscious and tied to the individually perceived fit (Etzet & Nagy, 2016; Feldman et al., 1999).

However, a certain percentage of young women drop out of IT majors and turn away from IT careers, which argues for the confrontation with specific experiences during higher education (Clayton et al., 2012; Miliszewska & Moore, 2010). Thus, we need to understand what factors challenge young women in the early stages of their IT careers and how this affects their perceptions of fit with an IT career to the point that some women persist in their careers and others turn away. Perceptions of IT career fit are explained by the person-environment fit model (Edwards et al., 2006). Its basis in organizational behavior research and its adaptation in the context of higher education are described in the following section.

### 2.2 The Person-Environment Fit Model

The person-environment fit model has been developed in organizational behavior research and is well established in explaining phenomena and outcomes related to the work context (Edwards et al., 2006). "Fit" describes the (degree of) congruence between an employee's personal characteristics, such as skills or values, and the situational characteristics of a particular environment, such as working conditions or demands (Edwards, 1996). A person-environment fit leads to positive work outcomes such as job satisfaction, organizational

commitment, performance, or persistence (see Figure 1).



**Figure 1. Multidimensional Person-Environment Fit Model (adapted from Jansen & Kristof-Brown, 2006)**

In empirical research, person-environment fit is often presented as a multidimensional construct encompassing several aspects of a worker's environment (Jansen & Kristof-Brown, 2006). Person-vocation fit represents the worker's fit with their chosen occupation. Person-job fit describes the employee's fit with the job in which they work. Person-organization fit represents the employee's fit with the organization in which they work. Person-group fit is the employee's fit with the workgroup or coworkers they work with. Person-person fit is the employee's fit with their supervisor or mentor.

Previous IS research draws on this theory to explain how extrinsic, social, and intrinsic outcomes, as well as gender, determine IT professionals' perceptions of person-organization and person-job fit (Venkatesh et al., 2017). The relationship between person-organization fit and IT professionals' commitment to training and development, as well as the career outcomes of IT professionals' fit with their supervisors, have also been examined (Jiang & Klein, 1999; Wingreen & Blanton, 2017). In addition, the theory is used to examine the consequences of IT professionals' job stress (Chilton et al., 2005; Ivancevich et al., 1985; Stich et al., 2019).

In the context of higher education, person-environment fit theory consolidates students' choice of a career path and a particular major based on a fit with their interests (Feldman et al., 1999; Schmitt et al., 2008; Tracey & Robbins, 2006; Wessel et al., 2008), abilities (Porter & Umbach, 2006), or preferred university (Gilbreath et al., 2011). Choosing a major is one of the most important decisions students must make, and it most often directs their careers into a particular field. Students first explore whether a major matches their individual characteristics and abilities. If there is a match, the environment is perceived as satisfying, reinforcing the choice and persistence in that major (Le et al., 2014). The fit between a student's abilities and the demands of the major is a strong predictor of individual outcomes such as academic motivation, satisfaction, performance, and success (Etzel & Nagy, 2016; Li et al., 2013). However, various stressors typically occur during the college years (Hackett et al., 1992; Struthers et al., 2000), often affecting career choices and perceptions of fit. This depends on the extent to which students appraise and respond to stressors. The transactional model of stress explains these appraisals and responses and is illustrated below in the context of stress in higher education.

### 2.3 The Transactional Model of Stress

The transactional model of stress introduces the three-step cognitive appraisal, which includes primary appraisal, secondary appraisal, and reappraisal, as a response to environmental stressors (Lazarus & Folkman, 1984). Primary appraisal involves interpreting the stressor as irrelevant, positive, or dangerous in terms of challenge, threat, harm, or loss. When a stressor is appraised as dangerous, secondary appraisal corresponds to analyzing individual resources or abilities to cope with the stressors. Stress, in the proper sense, is only triggered when one's resources are analyzed as inadequate. In order to overcome this stress, one copes in the form of problem-focused or emotion-focused strategies. Problem-focused strategies are aimed at solving and changing the stressful situation, whereas emotion-oriented strategies are used to regulate one's relationship to the stressful situation. After weighing and applying individual coping strategies, one evaluates the success of the applied strategies in the course of reappraisal. This may or may not lead to a change in the primary appraisal. Finally, the reappraisal reveals a specific outcome as a consequence (Lazarus & Folkman, 1984).

In the context of higher education, heavy workloads, poor grades, or financial problems are typical stressors that students must cope with (Abouserie, 1994). The variety of stressors can be classified into three categories: academic, material, and social stressors (Wilcox et al., 2005). Academic stressors include those that are directly related to the student's work and performance at the university. Material stressors refer to financial or material expenses students must bear while studying. Social stressors are related to students' relationships with their social environment.

When prolonged and perceived as unmanageable, such stressors cause students to question their goals and choices, sometimes jeopardizing their academic future (Folkman & Lazarus, 1985). Previous research indicates that students often question their situation and struggle between continuing or dropping out (Stage, 1989; Tinto, 1975). The struggle between continuing and dropping out refers to the fact that stressors are unexpected and discrepant experiences for students (Folkman & Lazarus, 1985; Misra & Castillo, 2004; Misra et al., 2003). They then question their previously conscious choices and perceptions of fit and ponder whether or not they are able to cope with the stressors. This is often the critical point at which students decide whether to continue their studies and remain on their chosen career path or to drop out and turn away from that career path. Thus, previous research suggests a link between a career choice based on fit perceptions, stressors that occur in higher education and affect fit perceptions, and consequences of distinct career outcomes such as persistence and turnaround.

Using the theoretical lens of the person-environment fit model and the transactional model of stress is appropriate to examine young females' stressors during higher education and their impact on perceptions of fit with the IT environment, as well as career outcomes (see Figure 2). Young women's choice of an IT career is well thought out and deliberate (Clayton et al., 2012). However, the initial perceived fit with an IT career proves to be true (or false) once the career begins with enrolling in an IT major. It is only then that young women find out if they can envision a place in the IT environment (Clayton et al., 2012; Quesenberry & Trauth, 2012). Our research aims to identify young women's stressors early in their IT careers, examine their impact on women's perceived fit with an IT career, and

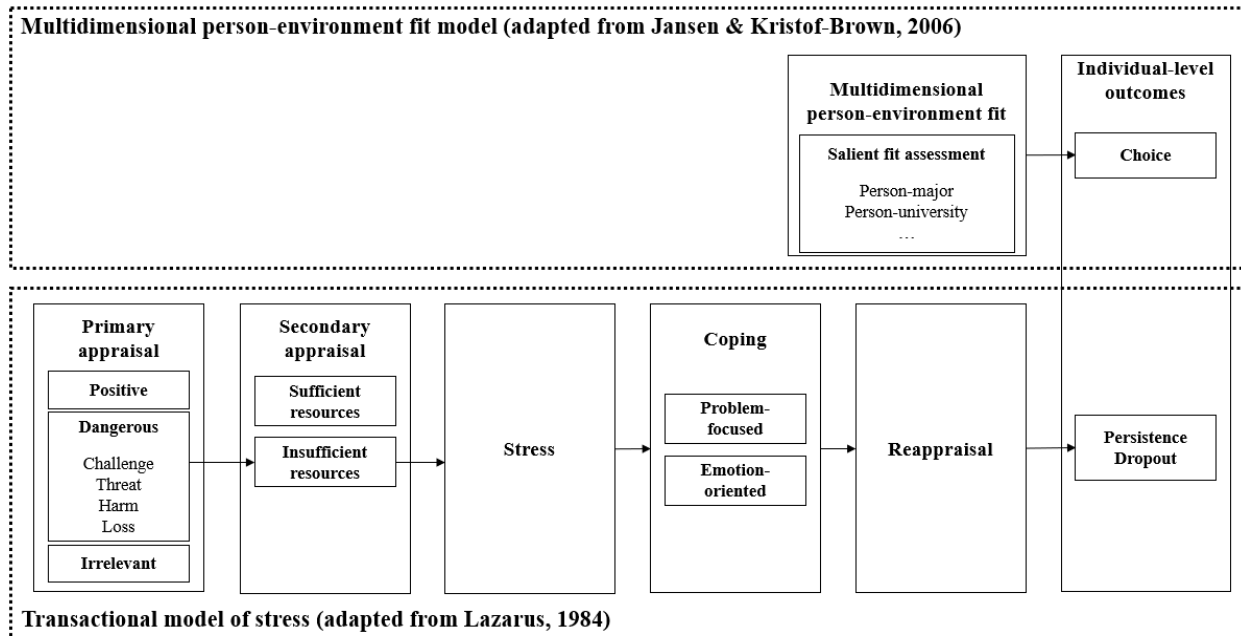


Figure 2. Illustration of Fundamental Models Related to Higher Education

illustrate the resulting career outcomes. To this end, we employ a qualitative methodology in the form of narrative interviews. Our methodological approach is described in the following section.

### 3. RESEARCH METHODOLOGY

To explore the perceptions of fit, stressors, coping strategies, and outcomes of young women in IT careers, we select a qualitative methodology using narrative interviews and guided retrospective introspection. These are characterized by study participants reflecting on their own experiences and beliefs in a given situation. As interviewees recount their personal trajectory in this situation, we obtain holistic data in the form of specific and interconnected memories. On this basis, fundamental processes and distinct patterns are modeled (Gould, 1995; Schwarz et al., 2014). Guided retrospective introspection is thus qualified to explore young women's stressors, their impact on fit perceptions, and the resulting IT career outcomes.

#### 3.1 Data Collection and Preparation

Conducting research through guided retrospective introspection requires specific premises on the part of the interviewing researchers and study participants (Schwarz et al., 2014). First, the interviewing researchers must have prior knowledge of the study context to ensure a common understanding between the interviewer and the interviewees. This requirement is met, as the first author who conducted the interviews found herself in the same situation when questioning her career choice during stressful situations in her undergraduate studies. Secondly, the interviewees must have direct experience with the study context to gain rigorous impressions and beliefs. A random selection of interviewees is, therefore, inappropriate. We, therefore, recruited suitable candidates by formulating the call for

participation accordingly. This call was posted in the university's internal e-learning system and various Facebook groups. The call was addressed to female IT students who were or had been in stressful situations. Those students who responded to the call were invited to an interview in the author team's laboratory or by telephone.

In terms of interview preparation and implementation, the method requires interviewers to develop an interview guide before conducting the interview (Schwarz et al., 2014). The interview questions are based on self-reflection on the study context to uncover dimensions for exploration. Thus, the authors created a guide that included questions about career choice, stressful situations, and their impact on the previously made career choice based on the underlying foundational models (Jansen & Kristof-Brown, 2006; Lazarus & Folkman, 1984). During the interview, the interviewer focuses on the interviewee's individual experiences and maintains an open-ended approach to allow participants to express their impressions and beliefs in almost their entirety. Interviewees were asked to answer the prepared questions in order. After a question was proposed, they were given enough time to reflect on their situation and to frame their experiences in their answers. The interviewer recorded the interview with the consent of each participant, and all participants were given pseudonyms to ensure confidentiality. The interviewer also took notes during the interview to illustrate each participant's process in each situation. After the interview was completed, the notes were shown to the interviewee for confirmation. Several months after the interview, we contacted the interviewees again to learn about their individual outcomes and whether or not they were still pursuing an IT career.

In total, we interviewed thirty-one female IT students from four universities in Germany. Following recommendations for qualitative IS research, we conducted interviews until no new insights could be added and distinctive patterns repeatedly

emerged (Sarker et al., 2013). Furthermore, 31 interviews represent an adequate number to pursue our research goal (Polkinghorne, 1989; Schwarz et al., 2014). The mean age of all interviewees was 23.6 years. Twenty-one of the current IT students were enrolled in bachelor's programs and six were enrolled in master's programs. Four interviewees have already dropped out of IT study programs. The interviewees' enrollment period ranged from the second semester of the bachelor's program to the fourth semester of the master's program (see Table 5 in Appendix).

### 3.2 Data Analysis

The interviews lasted between 10 and 24 minutes and were transcribed by the first author. To analyze the data, we follow the methodology of cross-subject and cross-dimension analysis (Schwarz et al., 2014). While the former focuses on each individual interview structure, the latter refers to uncovering interrelationships between interviews. On this basis, we model and theorize a unified process aligned with distinct patterns.

In terms of cross-subject analysis, we construct each interview according to the four levels of structure described in previous research (Pentland, 1999). Regarding the four levels of structure, we proceed as follows: The *text level* corresponds to the actual story told by each interviewee. This level corresponds to the interviews the first author conducted. The *story level* contains the narrated content from a specific point of view, i.e., the version of the experiences from the interviewee's point of view. For this purpose, the interviewer drew the individual process for each interviewee and went through the different stages with them repeatedly at the end of the interview. The *fabula level* represents a generic description of the events and relationships mentioned, telling the interviewee's story from the interviewer's perspective. The interviewer wrote the fabula after each interview. The *level of generating mechanisms* identifies underlying structures that explain the course of action. In doing so, we reconstruct how the interviewees experienced and dealt with the situations that occurred across all interviews. To uncover mechanisms as part of the fourth level of structure (Pentland, 1999), we combine our preliminary findings with those from the cross-dimension analysis. The subsequent cross-dimension analysis of the data follows the three-step process proposed by Glaser and Strauss (1967).

- 1) In the first step, the initial analysis of the transcripts, the interviewees' responses are broken down into different components. The first author decomposed each transcript according to the situations and experiences mentioned by the students.
- 2) The next step is the formal interpretation of the transcripts, which corresponds to the coding of each quote. The first and second authors classified the statements to develop a coding scheme based on definitions of fit perceptions (Jansen & Kristof-Brown, 2006), stressors (Wilcox et al., 2005), appraisals (Pekrun et al., 2002), coping strategies (Struthers et al., 2000), and career outcomes. In accordance with prior research and basic principles for analyzing qualitative data (Gioia et al., 2013), both authors identified concepts and consolidated them into higher-order themes. The connection of corresponding themes reveals aggregated dimensions, which form the data structure of this study (see Figure 3).
- 3) The analysis of formal interpretations represents the last

step of the procedure and allows the examination of common interpretations across subjects and consistency. For this purpose, the first and second author exported all coded quotations to the assigned process phase and the corresponding categories. Together with the third author, who was not involved in the coding procedure, these were analyzed for consistency within each dimension.

Analysis of the data across themes and dimensions allowed us to examine the manifestations of each dimension as well as the relationship between them. We present our findings from this approach in the next section.

## 4. RESULTS

By reviewing the results of the cross-subject and cross-dimension analyses, we identify five relevant dimensions, including interviewees' initial fit perceptions, stressors encountered, appraisals, coping strategies employed, and resulting career outcomes. In addition, we combine the underlying person-environment fit model and the transactional model of stress into a unified process that reveals the impact of stressors on young women's early IT careers. We present these findings in the following subsections.

### 4.1 Fit Perceptions and IT Career Choice

Interviewees chose an IT career based on their skills, preferences, experiences, and interests. They individually perceived fits with one or more aspects of an IT career and the corresponding environment. Drawing on the multidimensionality of the person-environment fit model and its definitions (Edwards & Billsberry, 2010; Jansen & Kristof-Brown, 2006), we identify five fit dimensions that are critical to young women's IT career choices.

**4.1.1 Person-Major Fit.** Most interviewees began their IT careers because of a specific major they discovered after graduating from high school. They chose an IT major because of its general concept or specific course content based on their interests, abilities, or previous experiences. For example, Hali said that she chose an IS program because it had an interdisciplinary concept that matched her skills in math and logic: *"I was always good at math and logic in school, and I wanted to try something new that required it. The Information Systems major offered an interdisciplinary and interesting focus."*

Gal found her fit with an IS Management program because of the specific learning content she was interested in: *"I used to study business, but I dropped out because it was too boring and theoretical. Most of the subjects were really boring. The IT courses I took as electives were much more exciting. That's when I discovered my interest in modeling languages and programming languages, and I really wanted to deepen it."*

The majority of young women indicated in their interviews that the match with an IT major was critical to their decision to pursue a career in IT. Thus, the person-major fit includes the match between the young woman and the IT major she chose.

**4.1.2 Person-University Fit.** For a few interviewees, program selection was less important but was made as a consequence of

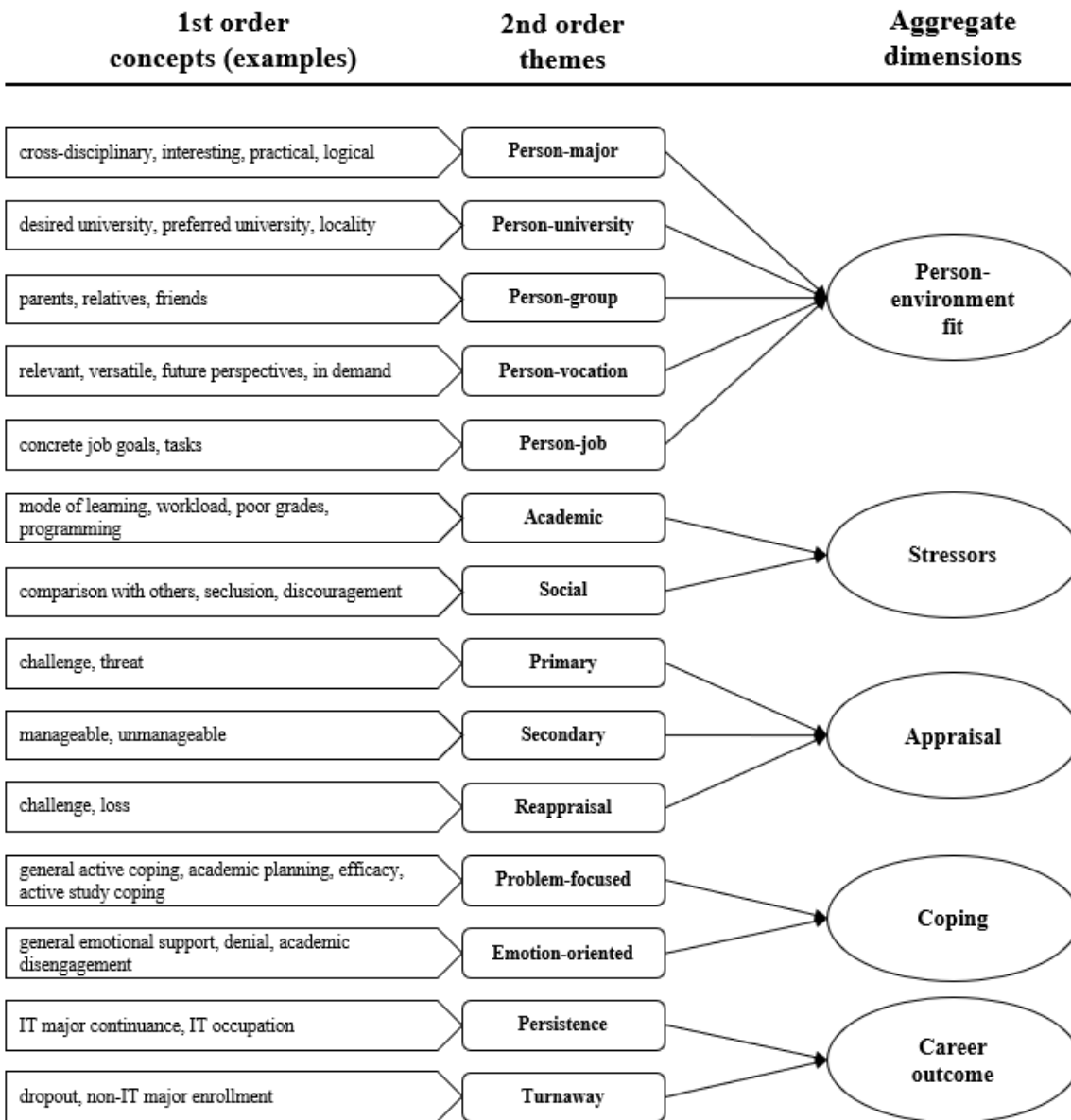


Figure 3. Data Structure According to Gioia et al. (2013)

a particular preferred university. These young women first decided on a specific university where they wanted to study before they looked at the majors offered or a specific career path. In this regard, Ava stated that she “[...] *didn’t have the time or the courage to look around after school. My mother had just died, and I could hardly think about my future. Even before graduation, I wanted to study at this university because I really liked it. Then I looked at the majors they offered, and the IT major was quite new.*”

Eleven out of thirty-one interviewees indicated that they chose an IT career primarily because it was offered at a particular university. Referring to previous research, person-university fit thus represents the fit between a young woman and the university she attends (Gilbreath et al., 2011).

**4.1.3 Person-Group Fit.** Several interviewees chose an IT career based on their acquaintance and communication with IT professionals. Through conversations and recommendations, the young women’s interest and imagination were sparked to explore IT career options and majors in more detail. The representatives were from their immediate environment, such as relatives or friends, or from their broader environment, such as professors or employees, and had different affiliations with the IT environment. For example, Fran reported that she attended a career fair and met several IT professionals and working students who promoted IT careers and majors: “*I had such a problem because I had very good grades in all subjects in school. I don’t mean to sound arrogant, but that makes it even harder to find the right major. So, I went to one of these career fairs and looked at all these different booths. One of*

*them caught my attention because it just had the slogan 'Majoring in IT,' and the guys at that booth looked like they were having a lot of fun. I joined them, and we talked for hours. In the end, I only visited that one booth, but I knew I wanted to work in that field and with those people."*

Nine young women reported that they chose an IT major and an IT career after interacting with one or more people in the IT field. Their accounts and illustrations led the young women to perceive an IT career as a suitable prospect. Based on previous research (Jansen & Kristof-Brown, 2006), the person-group fit describes the fit between a young woman and her peers with whom she will study or work.

**4.1.4 Person-Vocation Fit.** Some young women mentioned in their interviews that they already had concrete ideas about the IT profession and tendencies to pursue an IT career before they became deeply involved in an IT major. They gained exclusive insights into the issues and culture of the IT environment through individual experiences they had before or shortly after graduation. Lana, for example, spent a year working as an *au pair* for a family living in Silicon Valley. She experienced the extraordinary spirit and atmosphere of the tech scene, which made her want to be a part of it: *"During this year as an au pair, I experienced what others call the hype of Silicon Valley. It was an exciting time because I met many people from this business and heard about their ideas, topics and visions. I imagined that if I studied something with IT and programming and coding, I would still belong to the Valley and have the best conditions to return."*

The future prospects offered by the IT profession in terms of employment, salary, and security also match the career aspirations of some interviewees. For example, Perl said that she specifically chose a career in IT because it offered her a decent starting salary and job security: *"Honestly, IT people are needed everywhere these days. You're versatile; you'll always have a job and a decent salary. It would be kind of stupid not to. My education gave me a good business background, and additional IT skills would make me more employable."*

The perceived fit of these individual preferences and demands with the IT profession led twenty-one interviewees to choose an IT career and enroll in an IT major. Thus, the person-vocation fit represents the fit between young women and their chosen occupation, as described in previous research (Jansen & Kristof-Brown, 2006).

**4.1.5 Person-Job Fit.** A few females mentioned specific goals and visions for their future careers. These led them to pursue a career in IT, as Rose illustrates. She always wanted to be a professional video game designer and chose to major in IT to help her achieve that goal: *"I had to move around a lot as a child and teenager because my parents only worked in their jobs for two or three years and then changed jobs or employers. So, I never had a close circle of friends. The only constant in my childhood, no, in my life, is video games. I play a lot of them, and that made me want to work in the video game industry. I want to be a game designer myself and create video games for others."*

Only two female students reported specific career aspirations as a reason for choosing an IT career. Even before considering a career or major, they were convinced that their intended career was a good fit for them. Thus, enrolling in an IT major and choosing an IT career were expedient for realizing

this intention. Consistent with basic research (Jansen & Kristof-Brown, 2006), person-job fit describes a young woman's perceived fit with a desired job.

In summary, we can say that most of the young women from our interview sample chose an IT career because they were intensively engaged with the content of the IT majors and perceived a good fit with their abilities and interests. The fit with other environmental dimensions, such as the university or the IT profession, as the sole reason for choosing an IT career, is only true in very few cases. Nevertheless, it leads young women to consider an IT major.

## 4.2 Stressors in Higher IT Education

Studying in higher education rarely goes according to plan, and students are usually confronted with a variety of stressful situations during this time (Abouserie, 1994). In this context, previous research has distinguished stressors of an academic, social, and material nature (Wilcox et al., 2005). Academic stressors can be directly related to a student's performance and achievement in higher education, whereas material stressors refer to financial or material expenses. Social stressors, on the other hand, refer to students' relationships with their social environment. During the data analysis, we identified the stressors faced by young women during their higher education. We identified several academic and social stressors, while material stressors were not obvious (see Table 1).

Academic stressor	Social stressor	Material stressor
Mode of learning	Comparison with others	Not mentioned
Workload	Seclusion	
Poor grades	Discouragement	
Programming		

Table 1. Stressors in Higher IT Education

**4.2.1 Academic Stressors.** We identified three major stressors mentioned by interviewees that relate to the higher education system in general; only one stressor can be directly associated with an IT major. Several interviewees talked about the conflicts they had with the new way of learning at university, which they had not experienced in high school. For example, Bree reported that *"[...] the reason was the university system itself. Nobody forces you to take classes or do exercises. So, I didn't go there and took advantage of that freedom."*

For the first time in higher education, students are learning entirely on their own, and that worried Quinn: *"You're not prepared in school for what it's like to be in university. You don't know what to study. You don't know what to read or where to go for information. [...] I always expected that I would be taught everything I needed. But that wasn't the case! I had to teach myself a lot of extra stuff that was not part of the lectures. [...] The lessons are also very different from those at school. I prefer to ask questions personally and not in front of the whole group in the auditorium because I hardly know anyone!"*

In this context, some interviewees were stressed by the workload they had to carry at university. For example, Zoe recalled: *"You had to study so much for the exams, and I thought I could never handle the workload. You have to take four exams in three days. And just for one of them, you must prepare as much as you have time for all four."*

Getting poor grades in exams was another stressor that many young women mentioned in their interviews, including Vivi: *"I had many lows. Especially when it came to exams, which I didn't pass. I still haven't passed some of them, so I'm taking them again."*

In contrast to these general academic stressors, programming is the only stressor related to IT majors. For example, Tess said in her interview: *"From the beginning, I had huge, huge problems with programming because I didn't understand everything and the pace of the lecturer was way too fast! I couldn't keep up, especially during the long lectures. After one hour, I had already lost the connection, but it went on for another three hours, and I understood nothing at all."*

In summary, we counted four manifestations of academic stressors experienced by young women during their IT studies. Three are rather non-specific, while one is specific to IT majors.

**4.2.2 Social Stressors.** Three other social stressors were identified in the interviews. One is that many young women compared their actions or achievements with those of their peers. Such comparisons with others related to their ability to understand or grades, as Cala explained: *"Then I thought I did not understand. But the others did and understood everything from the beginning and had good grades. I had to study harder, write longer summaries, and get lower grades."*

Hali also compared her efforts to those of friends who were studying IT majors at other universities: *"When I compared my major with those of my friends at other universities, I always thought that it would have been much easier for me if I had chosen another city!"*

Another stressor for young women in IT was their isolation from their peers. Vivi said that from the first day of college, she did not fit in with her peers and that this situation improved only slightly by the time she graduated: *"I do most things on my own because I haven't found anyone who wants to join me yet. Most of the others either say they want to do it on their own or already have a study group. Or they have other classes and therefore other schedules, so you can't do anything together."*

A few female students also reported facing discouragement from their peers when choosing an IT major. Perl, for example, mentioned that relatives and friends disqualified her from a successful IT career: *"None of my friends or family thought I would be able to complete an IT major. They kept asking me if I was sure about this decision, even after I enrolled."*

In summary, all of the young women interviewed experienced academic stressors during their time in higher IT education. Twenty-one of them, the majority of the interviewees, were also confronted with social stressors. Such stressors were evaluated differently by the interviewees in terms of their interpretation and availability of resources. These differences in primary and secondary appraisals are illustrated in the next subsection.

### 4.3 Stressor Appraisal, Stress and Impact on Fit Perception

After being confronted with stressors during their studies, the young women evaluated these stressors and their effects. We distinguish between two groups of interviewees. The first group of eleven students appraised the stressors and rated them as manageable because they had the resources available to them. These students did not develop stress and could easily get out of the stressful situation.

Dani described the situation as follows: *"Well, sometimes they are really mammoth tasks that require an incredible amount of work. It's harder to keep up but not to despair. Most of the time, it can be done. You just have to know who to ask."*

On the other hand, the other 20 women were stressed by appraising the stressors and not having enough resources available. As a result, they thought more deeply about the stressful situations and felt anxious. All of them were irritated in this situation and questioned their previous choice of an IT major or career because of their stress. Dora, for example, shared her thoughts on this situation: *"I had bad grades the first two semesters, and then a close friend of mine dropped out of her major. I did not know how to do better in that situation. Then, I thought about dropping the major as well. Also, because I knew that I would have to take a programming intensive course next semester."*

When interpreting stressors and analyzing available resources, young females adopted different strategies, which are described in the next subsection.

### 4.4 Coping Strategies

Depending on their resources, students use different strategies to cope with stressors (see Table 2). Such strategies are either problem-focused or emotion-oriented (Lazarus & Folkman, 1984).

Problem-focused strategies	Emotion-oriented strategies
General active coping, e.g., searching for the cause	General emotional support, e.g., Persuasion from peers
Academic planning, e.g., selecting specific courses, spending time abroad, changing university	Denial, e.g., rationalizing, procrastinating, postponing exams
Efficacy, e.g., self-motivation, self-encouragement	Emotional venting, not mentioned
Active study coping, e.g., applying different study techniques, forming or joining learning groups, asking tutors and lecturers, taking optional or additional courses	Academic disengagement, e.g., absence from lectures, exclusive focus on certain lectures, looking for other majors

**Table 2. Applied Coping Strategies and Examples**

**4.4.1 Problem-Focused Strategies.** Some problem-focused strategies include general active coping, academic planning, efficacy, and active study coping (Struthers et al., 2000). Several interviewees identified their behavior as the cause of the stressful situation. In this context, a thorough examination of the primary cause of the stressor is consistent with the cognitive approach of general active coping. For example, Bree concludes that her poor performance and lack of motivation may be related to her attempt to learn completely on her own: *"It just happened because I never took any classes, never joined any study groups or anything like that. So it shouldn't have been a surprise that I lost the urge."*

After identifying the primary causes of their stressful situations, these young women used other strategies. Some of them focused on academic planning, which involves planning the next steps that could be taken. Such planning manifested

itself in avoiding choosing specific courses or intending to study at another university. Ava reported that she sought out much more information about different master's programs than she had before enrolling in her bachelor's program. As a result, she chose a master's program that placed more emphasis on her preferred areas of study: *"I wanted to fight my way through it. But I also knew that my master's program should focus on other topics, especially those that I'm really interested in. I pored over study guides, course descriptions, and assignment lists - and chose the master's program based on my preferred focus."*

In turn, Yola finished her semester and went to another university to continue her bachelor's degree: *"It's not that all Information Systems programs are the same. Different universities focus on different things. So, I did some research and found two universities that didn't place such a high priority on programming education. Then I wrote the exams that I was registered for and changed the university the next semester."*

Working on one's own efficacy was another way in which some interviewees reflected on their emotional state and encouraged themselves. Jill reported that she realized that she had learned enough, but she needed to improve her way of reproducing this in written and oral exams: *"I mean, I learned a lot, and I had a lot of knowledge. So I've pulled myself up and shown what I've got in course discussions or exams."*

The most commonly used problem-focused strategy was active study coping, which describes an immediate behavioral approach to improve the situation. Many interviewees actively sought information by asking their tutors, joining study groups, or trying alternative study techniques. Nici overcame her shyness and asked her peers for help with programming. *"At first, I felt a little stupid. But then I realized that I could ask even banal questions, and it turned out that most of my peers had asked the same questions before, only earlier."*

Gal approached the faculty's student council and met several council members who shared her interests and faced similar problems. Together, they started a study group with regular meetings to share knowledge, study together, and prepare assignments and exercises for lectures. *"We quickly realized that we had similar problems, so it was obvious that we should tackle them together. Our study group met once a week, and each of us got something from the meetings."*

**4.4.2 Emotion-Oriented Strategies.** In contrast to problem-focused strategies, emotion-oriented strategies address one's emotional state without changing the situation but rather the individual's relationship to it. These include general emotional support, denial, emotional venting, and academic disengagement. Several interviewees received general emotional support from their friends or peers. For example, Cala was encouraged and motivated by her peers: *"They said if they could do it, so could I. That gave me a little confidence and hope."*

Some women used the denial strategy, rationalizing or avoiding the stressors. Sara, for example, accepted her situation by attributing it to her peers' pre-enrollment knowledge: *"The others already had a lot of knowledge and experience from their apprenticeships or internships. I convinced myself that I shouldn't compete with someone like that."*

Finally, some interviewees engaged in academic disengagement, a behavioral approach to mitigating the situation, by skipping classes and engaging in other subjects. Lana reported that she stopped attending lectures, tutorials, and

exams that focused on IT content and programming. *"It was just too abstract for me, and I completely lost the motivation to listen to or engage with these things. Instead, I focused on other classes, especially the language and culture classes. That's when I discovered that languages were more fun and that I had a talent for them."*

In summary, all of the young women used either problem-focused or emotion-oriented strategies, or a combination of both, to cope with their stress. Some started with emotion-focused strategies and combined them with problem-focused strategies, while others used only problem-focused strategies. The minority of interviewees tried problem-focused strategies but eventually turned to emotion-oriented strategies. The extent to which the use of coping strategies affects young women's potential to resolve their situations, their perceptions of their individual IT career fit, and thus their career outcomes are discussed below.

#### 4.5 Reappraisal and Career Outcomes

After applying the coping strategies, the young women reevaluated their initial interpretation of the stressors. Sixteen women reported that the use of individual strategies helped them overcome their stress. As a result, they gained confidence in their career choice and confirmed their perception of aptitude for an IT career. Emma described that she *"[...] saw that this was in line with my talent and my disposition. It showed me that I could make such a difference in computer science. So, at the end of the day, it's what fits me and what I want to do."* These women are still pursuing IT careers. Most have successfully completed their IT studies and are now working in an IT job, while a few are in the final stages of their studies (see Table 3).

Persistence in IT career		Turnaway from IT career
Working in IT job	Enrolled in IT major	Enrolled in non-IT major
IT operations owner (1)	Applied computer science (1)	Anglistics & romance studies (1)
Application developer (5)	Information systems (6)	Business Education (1)
Application specialist (1)	PhD candidate (2)	International business studies (1)
IT consultant (3)		Sociology (1)
Cybersecurity expert (1)		
Game designer (1)		
Product owner (1)		
Unknown (5)		

**Table 3. Career Outcomes of Interviewees**

In contrast, the remaining four women reported that they were unable to overcome their stress. They had used various coping strategies but had never reached the point where they felt in control of their situation. As a result, they continued to question and eventually lose their belief that they were a good fit for an IT career. The inability to validate their perception of fit eventually led them to drop their IT majors and turn away from an IT career.

These results revealed relevant relationships among fit perceptions, college stressors, coping strategies, and career outcomes. On this basis, we provide an extended model that

illustrates this relationship by combining our findings with previous research. We further derived three distinct patterns that explain the career outcomes revealed, as described in the following section.

### 5. A COMBINED MODEL AND DISTINCT PATTERNS OF FIT PERCEPTIONS AND COPING IN HIGHER IT EDUCATION

The interviews provide indications of relationships between perceptions of IT career fit, the impact of stressors during IT higher education, and consequences for career outcomes. We reveal and theorize these relationships as a composite model (see Figure 4).

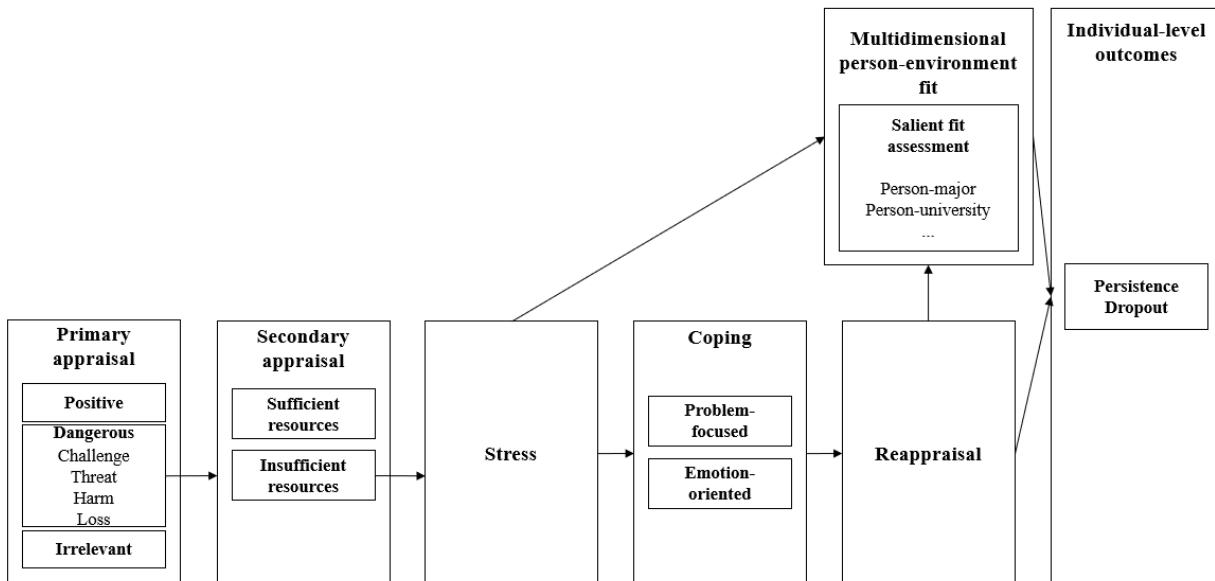
This process illustrates that young women initially appraise the stressors during their time in higher IT education. Primary and secondary appraisals involve the interpretation of stressors and the assessment of their manageability. When females experienced stress due to inadequate resources, this stress impacted their fit perceptions prior to choosing an IT career. After using different strategies to cope with stressful situations, the young women reevaluated their initial interpretation of the stressor. This then leads to different career outcomes. The process that young women go through when confronted with stress in their early IT careers is based on the well-established person-environment fit theory and coping theory.

Initially, young women's IT career choices are attributed to the person-environment fit theory (Edwards et al., 2006). They form subjective perceptions based on their interests, abilities, or past experiences of how well they fit into an IT career. This fit is manifested in several dimensions, which is in line with previous literature highlighting the multidimensionality of the person-environment fit (Edwards & Billsbery, 2010). Our interviews show that the young women's perceived fit with an IT major, a particular university, a group of IT representatives, the general IT profession, and specific IT jobs is the determining factor in their IT career choice. However, we note that not all of the fit dimensions need to apply, but at least one

needs to be sufficiently distinct. Some interviewees reported that they perceived a fit with the IT environment on multiple dimensions, while others mentioned only one or two fit dimensions.

In line with previous research (Ahuja, 2002), we consider higher education in the form of enrolling in an IT major as the starting point of young women's IT careers. For many students, higher education represents a new phase of life, and they experience self-responsibility and self-management at a higher level. Very few students make it through college unscathed, but even more are confronted with stressful situations sooner or later. These stressors can have a serious impact on students' persistence and career aspirations. Previous research has shown that such stressors, when prolonged and perceived as unmanageable, cause students to question their previous goals and choices (Folkman & Lazarus, 1985). For example, stress in higher education may cause students to question their fit with a major. Struggling with the decision to continue or drop out of a major is a common outcome for students in such situations (Stage, 1989; Tinto, 1975). We observed this phenomenon in our interviews as well. Regardless of the academic or social nature of the stressor, the young women evaluated it. This evaluation included the interpretation of the stressors as well as an analysis of their manageability. If the stressors were rated as manageable because they had sufficient resources, the females did not experience stress. If they did not have sufficient resources, the women were stressed and questioned their choice of an IT major and their fit with an IT career. Thus, stressor appraisals and the resulting stress are critical to young women's questioning of their fit with an IT career.

The appraisal and the overcoming of stressful situations are consolidated in the theory of coping. Coping is defined as a person's cognitive and behavioral efforts in dealing with discrepant experiences (Lazarus, 1991; Lazarus & Folkman, 1984). The theory describes the process that individuals go through when confronted with discrepant experiences. This process includes the stages of appraising such a discrepant experience, responding in the form of applying problem-



**Figure 4. Combined Model of Fit Perceptions and Coping in Higher Education**

focused and/or emotion-focused coping strategies, and reappraising the experience, which ultimately determines the resulting outcome. Following previous research (Folkman & Lazarus, 1985), the stressors encountered in our study represent such discrepant experiences. Previous literature also addresses specific stages of the coping process in relation to higher education. Several stressors (Abouserie, 1994; Wilcox et al., 2005) and coping strategies used (Struthers et al., 2000) are addressed in fragmented parts. In this context, we can refer to coping theory: After appraising the stressors, interviewees responded with different strategies to cope with them. Some used problem-focused strategies, while others used both problem-focused and emotion-focused strategies. The subsequent confirmation or non-confirmation of perceived fit in an IT career during the reappraisal of the stressful situation represents an update of the previously questioned fit perceptions when under stress. The reappraisal and (non-) confirmation of fit result in a distinct career outcome in terms of persistence or turnaway.

In addition, we uncover significant differences between three groups of interviewees as they navigate this process, which we present in the form of three distinct patterns. These patterns indicate whether specific manifestations of appraisals, coping strategies, and the order in which they are applied influence the resulting career outcome (see Table 4).

Pattern	#1	#2	#3
Stressor	Academic <b>OR</b> social	Academic <b>OR</b> social	Academic <b>OR</b> social
Appraisal	Dangerous <b>AND</b> Sufficient resources	Dangerous <b>AND</b> Insufficient resources <b>AND</b> Fit questioning	Dangerous <b>AND</b> Insufficient resources <b>AND</b> Fit questioning
Coping strategy	Problem- focused coping <b>OR</b> Emotion- oriented coping	General active coping <b>AND</b> (Problem- focused coping <b>OR</b> Emotion- oriented coping)	Problem- focused coping <b>OR</b> Emotion- oriented coping <b>NOT</b> General active coping
Reappraisal	Overcoming	Overcoming <b>AND</b> Fit confirmation	Non- overcoming <b>AND</b> Fit non- confirmation
Outcome	Persistence	Persistence	Turnaway

**Table 4. Three Patterns of Appraising and Coping With Stressors in Higher Education**

Regardless of the type of stressor, all young women rated it in terms of its manageability. Pattern #1 shows that when stressors were immediately rated as manageable, they had no further impact on the interviewees' perceptions of fit because they were able to quickly cope with the stressful situation by

using predominantly problem-focused strategies. These women quickly resolved and overcame their stress and remained in IT careers. The other two patterns show that when the stressors were not initially perceived as manageable during the appraisal, the young women were concerned and irritated to the point of questioning their previously perceived fit with an IT career. Pattern #2 covers the group of young women who initially engaged in general active coping during the secondary appraisal. By examining the causes of their stressors in detail and then applying a different strategy, they overcame their stress. There was no difference in whether the women used a different problem-focused strategy, an emotion-focused strategy, or both. Through this approach, they were able to confirm their prior fit with an IT career, continue their IT majors, and persist in IT careers. In comparison, pattern #3 involves the final group of women who did not explore the primary causes of their stressors in the form of general active coping. While they initially engaged in problem-focused coping strategies, they then lapsed into predominantly emotion-focused strategies. Thus, it was impossible for them to address the primary cause of their stressors and overcome their stress. As a result, these women were unable to confirm their fit perceptions and turned away from an IT career. This observation is consistent with the findings of previous studies that problem-focused strategies have a more positive impact on outcomes than emotion-focused strategies (Struthers et al., 2000).

In summary, the unified process presented, as well as the patterns revealed, illustrate whether appraisals and coping strategies determine the outcomes of young women in IT careers. From this, several research contributions, implications for practice, and future research needs can be derived. These are presented in the following discussion section.

## 6. DISCUSSION

With the relevance and attempts to increase gender diversity in the IT environment, we examine the perceptions of fit and stressors of young women in higher education. Our research goal was to identify how young women perceived fit with the IT environment and how stressful situations during IT higher education affect career outcomes. The existing literature in this stream agrees that the choice of a career path and corresponding major is related to the formation of an individual who fits with the domain environment (Feldman et al., 1999; Gilbreath et al., 2011). Since the occurrence of stressful situations during higher education is the rule rather than the exception, previous research has revealed the nature of such stressors (Wilcox et al., 2005). The process of coping with such situations is explained by the different strategies students use (Folkman & Lazarus, 1985). However, the relationship between fit perceptions, stress, and coping has been suggested but not focused on. This study addresses this relationship and focuses on women in higher IT education using a qualitative study design. We uncovered various manifestations of fit perceptions, stressors, appraisals, coping strategies, and career outcomes. In addition, we uncovered the links between these and modeled a combined process. Upon completion of our research, we present theoretical contributions and practical implications. In addition, we discuss the limitations of the current study and provide an outlook for future research needs.

### 6.1 Theoretical Contributions

We contribute to IS research by providing an explanation for the understudied issue of young women's stress in early IT careers. Research on stress is a well-established topic in the IS literature that is closely related to women's persistence and advancement in IT careers (Armstrong et al., 2015; Gallivan, 2004). Gender issues are of particular focus because women are still underrepresented in the field, and their underrepresentation is increasing (Armstrong et al., 2015; Brooks et al., 2015; Joia & Mangia, 2017). Therefore, causes and interventions to counteract this trend are being investigated (Annabi & Lebovitz, 2018; Armstrong et al., 2018; Joseph et al., 2015; Quesenberry & Trauth, 2012). However, most previous research examines the barriers and career outcomes of female IT professionals, with little attention paid to women in higher IT education. In particular, female students are more likely to consider withdrawing from their IT studies and dropping out of an IT major (Miliszewska & Moore, 2010). In this context, our research shows what stressors young women experience in the early stages of their IT careers and how they cope with them. Our research findings provide an explanation of the stressors, the corresponding coping strategies, and the resulting career outcomes.

We further contribute to IS research on gender issues by examining young women's IT career choices from the perspective of person-environment fit theory. By choosing an IT major and enrolling in higher education, most young women make a conscious decision to pursue an IT career (Ahuja, 2002). Previous IS research mainly refers to the established theory of reasoned action (Fishbein & Ajzen, 1975) or theory of planned behavior (Ajzen, 1991) to explain the determinants that influence this choice (e.g., Downey et al., 2009; Oehlhorn et al., 2017; Zhang, 2007). While important, this perspective is limited in its ability to explain phenomena beyond the single major choice. The use of person-environment fit theory provides a much broader view of student choice, performance, and outcomes in higher education (Porter & Umbach, 2006). This view allows us to focus on aspects beyond young women's career choices, such as their persistence and advancement in IT careers, as suggested by previous research (Ahuja, 2002; Gorbacheva et al., 2019). We now provide evidence on how perceptions of fit prior to the IT career choice are influenced by stress that occurs after that choice. In addition, we determine how the use of certain coping strategies, including questioning one's own fit in the IT environment, is beneficial in overcoming stress and how this leads to positive career outcomes in terms of young women's persistence in IT careers. In this way, we provide a holistic view of young women's career stages and potential outcomes.

In addition, we contribute to research on person-environment fit theory and coping theory. Previous literature points to their interaction but refrains from a more in-depth focus. Person-environment fit theory describes students' career choices based on individually perceived fits with the environment (Porter & Umbach, 2006), which influences their performance, achievement, and outcomes. Coping theory, on the other hand, focuses on the process that students go through when confronted with discrepant experiences during their college years. These experiences are caused by different stressors (Abouserie, 1994; Wilcox et al. 2005), are appraised differently (Pekrun et al. 2002), and lead to the use of different coping strategies (Struthers et al., 2000). Although previous

literature has addressed this issue, it has not considered the coping process as a whole, but rather in fragments, as previous research has only focused on certain stages or components of the process.

Our study considers the entire process in an overall context and demonstrates the interaction with person-environment fit theory. To do so, we chose a qualitative methodology and used guided retrospective introspection, which is characterized by holistic data, to reconstruct the underlying processes and identify clear patterns (Gould, 1995; Schwarz et al., 2014). After completing the analysis, we confirm previous research that shows that stressors in higher education are irritating and discrepant experiences for students (Folkman & Lazarus, 1985). We identify different manifestations of young women's stressors, coping strategies employed, and career outcomes. These serve as a basis for modeling a combined process and for revealing distinct patterns of trajectory that are associated with the interaction of person-environment fit theory and coping theory. Both show that the career outcomes of young women depend on their cognitive appraisals and coping strategies. These are identified as critical factors in determining whether young women persist in IT careers or turn away.

### 6.2 Practical Implications

In addition, we provide practical implications for higher education institutions. Several educational, political, and business advocates for increased female representation in IT have an interest in increasing the number of female students who successfully complete their IT majors. Our study illustrates which fit perceptions lead to women's choice of an IT major, the stressors they face during their college years, and how these stressors affect their prior fit perceptions. In addition, we identify coping strategies that successfully support young women's career outcomes. These findings provide a basis for educational institutions to develop appropriate strategies and interventions that are proven to be promising, especially in technical fields (Atindama et al., 2025). For example, the person-environment fit theory perspective highlights connections to attract more young women to IT careers. These can be used to develop persuasive marketing strategies that young women can identify with. Furthermore, our results show that a variety of stressors occur during higher education, most of which cannot be prevented by institutions. It is, therefore, up to educational institutions to examine how they can best support young women.

Specific measures, such as the introduction of counseling services, can help young women explore the causes of their stressful situations and offer them perspectives. Using the example of female students who have difficulties with programming, counselors can draw their attention to the wide range of IT jobs: There are numerous types of jobs in the IT field (Eckhardt, et al., 2016), and not all of them require profound programming skills (Lo & Riemenschneider, 2011). Counselors will be able to discuss possible alternatives with the students and plan the choice of courses for the rest of their studies. In any case, planned interventions should be more problem-focused, as this has been shown to lead to more desired outcomes - the persistence of female IT students. While previous research shows that women tend to use more emotion-focused coping than problem-focused coping (Stanton et al., 2000), which is detrimental to the retention of young women in IT careers, it is all the more important to provide opportunities

for problem-focused coping. However, the emotional component of showing understanding and encouragement in such situations should always be considered.

### 6.3 Future Research

The theoretical contributions and practical implications reveal several aspects that future research should address. One is that our study cannot reveal the strength of a fit perception that is necessary to benefit the choice of an IT career. Thus, future research needs to investigate how strong one or more fit perceptions need to be for young women to choose an IT career and enroll in an IT major. In addition, our interviews reveal that the stressors experienced challenge young women's fit in the IT environment when they are initially perceived as unmanageable. It remains unclear whether the stressors affect person-environment fit as a whole or only individual fit dimensions. Therefore, we call for future research to examine the distinct links between fit perceptions formed before and after choosing an IT career, as well as after the occurrence of specific stressors. Finally, our study highlights the appraisal of stressors that occur as critical factors in whether or not fit perceptions are challenged. We find that young women who immediately perceive stressors as manageable do not question their fit in the IT environment, whereas women who initially perceive stressors as unmanageable do. Future research is needed to explore the determinants that influence stressor appraisals further.

### 6.4 Limitations

Our research has two limitations. First, we conducted interviews with female students from different universities in one country. This is a limitation in terms of the identified stressors that young women face in their early IT careers: The interviews were conducted in a country with a high level of education, excellent study conditions, and low tuition fees compared to many other countries. This may also explain the finding that no respondent mentioned material stressors. Second, although we followed established standards for conducting qualitative studies, we cannot ensure that we have identified all possible manifestations of fit dimensions, stressors, and strategies.

## 7. CONCLUSION

We conducted an exploratory study with 31 current and former female IT students. The use of the guided retrospective introspection method allows us to provide a comprehensive overview of the coping process that female IT students go through when experiencing thoughts of turning away from their IT major during higher education. Our findings reveal different manifestations of each stage of the coping process. Furthermore, we identified consistent patterns within the process course of all interviewees, which allowed us to distinguish between three different groups of students. In contrast to previous research that has considered the process of coping during academic education in fragmented parts, we focus on the process as a whole. In doing so, we address a serious debate, as the increasing shortage of IT professionals, the underrepresentation of women in IT fields, and the high number of female IS student dropouts are still much-discussed issues in IS research.

## 8. REFERENCES

- Abouserie, R. (1994). Sources and Levels of Stress in Relation to Locus of Control and Self Esteem in University Students. *Educational Psychology*, 14(3), 323-330. <https://doi.org/10.1080/0144341940140306>
- Adya, M., & Kaiser, K. M. (2005). Early Determinants of Women in the IT Workforce: A Model of Girls' Career Choices. *Information Technology & People*, 18(3), 230-259. <https://doi.org/10.1108/09593840510615860>
- Ahuja, M. K. (2002). Women in the Information Technology Profession: A Literature Review, Synthesis and Research Agenda. *European Journal of Information Systems*, 11(1), 20-34. <https://doi.org/10.1057/palgrave.ejis.3000417>
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Annabi, H., & Lebovitz, S. (2018). Improving the Retention of Women in the IT Workforce: An Investigation of Gender Diversity Interventions in the USA. *Information Systems Journal*, 28(6), 1049-1081. <https://doi.org/10.1111/isi.12182>
- Armstrong, D. J., Brooks, N., & Riemenschneider, C. K. (2015). Exhaustion From Information System Career Experience: Implications for Turn-Away Intention. *MIS Quarterly*, 39(3), 713-728. <https://doi.org/10.25300/MISQ/2015/39.3.10>
- Armstrong, D. J., Nelms, J. E., Riemenschneider, C. K., & Reid, M. F. (2012). Revisiting the Barriers Facing Women in Information Systems. *Journal of Computer Information Systems*, 53(2), 65-74. <https://doi.org/10.1080/08874417.2012.11645615>
- Armstrong, D. J., Riemenschneider, C. K., Allen, M. W., & Reid, M. F. (2007). Advancement, Voluntary Turnover and Women in IT: A Cognitive Study of Work-Family Conflict. *Information & Management*, 44(2), 142-153. <https://doi.org/10.1016/j.im.2006.11.005>
- Armstrong, D. J., Riemenschneider, C. K., & Giddens, L. G. (2018). The Advancement and Persistence of Women in the Information Technology Profession: An Extension of Ahuja's Gendered Theory of IT Career Stages. *Information Systems Journal*, 28(6), 1082-1124. <https://psycnet.apa.org/doi/10.1111/isi.12185>
- Atindama, E., Ramsdell, M., Wick, D. P., Mondal, S., & Athavale, P. (2025). Impact of Targeted Interventions on Success of High-Risk Engineering Students: A Focus on Historically Underrepresented Students in STEM. *Frontiers in Education*, 10, 1-15. <https://doi.org/10.3389/feduc.2025.1435279>
- Baroudi, J. J., & Igbaria, M. (1994). An Examination of Gender Effects on Career Success of Information Systems Employees. *Journal of Management Information Systems*, 11(3), 181-201. <https://doi.org/10.1080/07421222.1994.11518055>
- Brooks, N. G., Hardgrave, B. C., O'Leary-Kelly, A. M., McKinney, V., Wilson, D. D. (2015). Identifying With the Information Technology Profession: Implications for Turnaway of IT Professionals. *The Data Base for Advances in Information Systems*, 46(1), 8-23. <https://doi.org/10.1145/2747544.2747546>

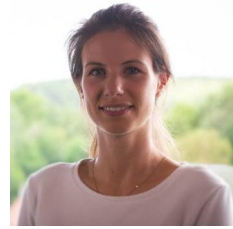
- Chilton, M. A., Hardgrave, B. C., & Armstrong, D. J. (2005). Person-Job Cognitive Style Fit for Software Developers: The Effect on Strain and Performance. *Journal of Management Information Systems*, 22(2), 193-226. <https://doi.org/10.1080/07421222.2005.11045849>
- Choudhury, V., Lopes, A. B., & Arthur, D. (2010). IT Careers Camp: An Early Intervention Strategy to Increase IS Enrollments. *Information Systems Research*, 21(1), 1-14. <https://doi.org/10.1287/isre.1090.0259>
- Clayton, K., Beekhuizen, J., & Nielsen, S. (2012). Now I Know What ICT Can Do for Me! *Information Systems Journal*, 22(5), 375-390. <https://doi.org/10.1111/j.1365-2575.2012.00414.x>
- Downey, J. P., McGaughey, R., & Roach, D. (2009). MIS Versus Computer Science: An Empirical Comparison of the Influences on the Students' Choice of Major. *Journal of Information Systems Education*, 20(3), 357-368. <https://aisel.aisnet.org/jise/vol20/iss3/11>
- Eckhardt, A., Laumer, S., Maier, C., & Weitzel, T. (2016). The Effect of Personality on IT Personnel's Job-Related Attitudes: Establishing a Dispositional Model of Turnover Intention Across IT Job Types. *Journal of Information Technology*, 31(1), 48-66. <https://doi.org/10.1057/jit.2014.27>
- Edwards, J. R. (1996). An Examination Of Competing Versions of the Person-Environment Fit Approach to Stress. *Academy of Management Journal*, 39(2), 292-339. <https://www.jstor.org/stable/256782>
- Edwards, J. R., Cable, D. M., Williamson, I. O., Lambert, L. S., & Shipp, A. J. (2006). The Phenomenology of Fit: Linking the Person and Environment to the Subjective Experience of Person-Environment Fit. *The Journal of Applied Psychology*, 91(4), 802-827. <https://doi.org/10.1037/0021-9010.91.4.802>
- Edwards, J. A., & Billsbery, J. (2010). Testing a Multidimensional Theory of Person-Environment Fit. *Journal of Managerial Issues*, 22(4), 476-493. <https://www.jstor.org/stable/25822526>
- Etzel, J. M., & Nagy, G. (2016). Students' Perceptions of Person-Environment Fit. *Journal of Career Assessment*, 24(2), 270-288. <https://doi.org/10.1177/1069072715580325>
- Feldman, K. A., Smart, J. C., & Ethington, C. A. (1999). Major Field and Person-Environment Fit. *The Journal of Higher Education*, 70(6), 642-669. <https://doi.org/10.2307/2649169>
- Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.
- Folkman, S., & Lazarus, R. S. (1985). If It Changes It Must Be a Process: Study of Emotion and Coping During Three Stages of a College Examination. *Journal of Personality and Social Psychology*, 48(1), 150-170. <https://doi.org/10.1037/0022-3514.48.1.150>
- Frieze, C., & Quesenberry, J. L. (2019). How Computer Science at CMU Is Attracting and Retaining Women. *Communications of the ACM*, 62(2), 23-26. <http://dx.doi.org/10.1145/3300226>
- Gallivan, M. J. (2004). Examining IT Professionals' Adaptation to Technological Change. *The Data Base for Advances in Information Systems*, 35(3), 28-49. <http://dx.doi.org/10.1145/1017114.1017119>
- Gilbreath, B., Kim, T.-Y., & Nichols, B. (2011). Person-Environment Fit and Its Effects on University Students: A Response Surface Methodology Study. *Research in Higher Education*, 52(1), 47-62. <https://doi.org/10.1007/s11162-010-9182-3>
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking Qualitative Rigor in Inductive Research. *Organizational Research Methods*, 16(1), 15-31. <https://doi.org/10.1177/1094428112452151>
- Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago, IL, USA: Aldine Pub. Co.
- Gorbacheva, E., Beekhuizen, J., vom Brocke, J., & Becker, J. (2019). Directions for Research on Gender Imbalance in the IT Profession. *European Journal of Information Systems*, 28(1), 43-67. <https://doi.org/10.1080/0960085X.2018.1495893>
- Gould, S. J. (1995). Researcher Introspection as a Method in Consumer Research: Applications, Issues, and Implications. *Journal of Consumer Research*, 21(4), 719-722. <https://doi.org/10.1086/209430>
- Hackett, G., Betz, N. E., Casas, J. M., & Rocha-Singh, I. A. (1992). Gender, Ethnicity, and Social Cognitive Factors Predicting the Academic Achievement of Students in Engineering. *Journal of Counseling Psychology*, 39(4), 527-538. <https://doi.org/10.1037/0022-0167.39.4.527>
- Hoogendoorn, S., Oosterbeek, H., & van Praag, M. (2013). The Impact of Gender Diversity on the Performance of Business Teams: Evidence From a Field Experiment. *Management Science*, 59(7), 1514-1528. <https://doi.org/10.1287/mnsc.1120.1674>
- Ivancevich, J. M., Albert Napier, H., & Wetherbe, J. C. (1985). An Empirical Study of Occupational Stress, Attitudes and Health Among Information Systems Personnel. *Information & Management*, 9(2), 77-85. [https://doi.org/10.1016/0378-7206\(85\)90029-1](https://doi.org/10.1016/0378-7206(85)90029-1)
- Jansen, K., & Kristof-Brown, A. (2006). Toward a Multidimensional Theory of Person-Environment Fit. *Journal of Managerial Issues*, 18(2), 193-212. <https://www.jstor.org/stable/40604534>
- Jiang, J. J., & Klein, G. (1999). Supervisor Support and Career Anchor Impact on the Career Satisfaction of the Entry-Level Information Systems Professional. *Journal of Management Information Systems*, 16(3), 219-240. <https://doi.org/10.1080/07421222.1999.11518262>
- Joia, L. A., & Mangia, U. (2017). Career Transition Antecedents in Information Technology Area. *Information Systems Journal*, 27(1), 31-57. <https://doi.org/10.1111/isi.12087>
- Joseph, D., Ang, S., & Slaughter, S. A. (2015). Turnover or Turnaway? Competing Risks Analysis of Male and Female IT Professionals' Job Mobility and Relative Pay Gap. *Information Systems Research*, 26(1), 145-164. <https://doi.org/10.1287/isre.2014.0558>
- Lazarus, R. S. (1991). *Emotion and Adaptation*. New York, NY, USA: Oxford University Press. <https://doi.org/10.1093/oso/9780195069945.001.0001>
- Lazarus, R. S., & Folkman, S. (1984). *Stress, Appraisal, and Coping* (1st ed.). New York, NY, USA: Springer.
- Le, H., Robbins, S. B., & Westrick, P. (2014). Predicting Student Enrollment and Persistence in College STEM Fields Using an Expanded P-E Fit Framework: A Large-

- Scale Multilevel Study. *The Journal of Applied Psychology*, 99(5), 915-947. <https://doi.org/10.1037/a0035998>
- Li, Y., Yao, X., Chen, K., & Wang, Y. (2013). Different Fit Perceptions in an Academic Environment. *Journal of Career Assessment*, 21(2), 163-174. <https://doi.org/10.1177/1069072712466713>
- Lo, J., & Riemenschneider, C. (2011). Heterogeneity of IT Employees. *The Data Base for Advances in Information Systems*, 42(3), 71-95. <https://doi.org/10.1145/2038056.2038061>
- Miliszewska, I., & Moore, A. (2010). Encouraging Girls to Consider a Career in ICT: A Review of Strategies. *Journal of Information Technology Education: Innovations in Practice*, 9, 143-166. <https://doi.org/10.28945/1292>
- Misra, R., & Castillo, L. G. (2004). Academic Stress Among College Students: Comparison of American and International Students. *International Journal of Stress Management*, 11(2), 132-148. <https://doi.org/10.1037/1072-5245.11.2.132>
- Misra, R., Crist, M., & Burant, C. J. (2003). Relationships Among Life Stress, Social Support, Academic Stressors, and Reactions to Stressors of International Students in the United States. *International Journal of Stress Management*, 10(2), 137-157. <https://doi.org/10.1037/1072-5245.10.2.137>
- Oehlhorn, C. E., Laumer, S., & Maier, C. (2017). About Well-Considered Decisions, Favorable Alternatives and Sudden Ideas: A Qualitative Research to Identify Beliefs That Influence Women to Study Information Systems in Germany. *Wirtschaftsinformatik 2017 Proceedings*. <https://aisel.aisnet.org/wi2017/track04/paper/5/>
- Panko, R. R. (2008). IT Employment Prospects: Beyond the Dotcom Bubble. *European Journal of Information Systems*, 17(3), 182-197. <https://doi.org/10.1057/ejis.2008.19>
- Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic Emotions in Students' Self-Regulated Learning and Achievement: A Program of Qualitative and Quantitative Research. *Educational Psychologist*, 37(2), 91-105. [https://doi.org/10.1207/S15326985EP3702\\_4](https://doi.org/10.1207/S15326985EP3702_4)
- Pentland, B. T. (1999). Building Process Theory With Narrative: From Description to Explanation. *Academy of Management Review*, 24(4), 711-724. <https://doi.org/10.2307/259350>
- Polkinghorne, D. E. (1989). Phenomenological Research Methods. In R. S. Valle & S. Halling (Eds.), *Existential-Phenomenological Perspectives in Psychology* (pp. 41-60). Boston, MA, USA: Springer. [https://doi.org/10.1007/978-1-4615-6989-3\\_3](https://doi.org/10.1007/978-1-4615-6989-3_3)
- Porter, S. R., & Umbach, P. D. (2006). College Major Choice: An Analysis of Person-Environment Fit. *Research in Higher Education*, 47(4), 429-449. <https://doi.org/10.1007/s11162-005-9002-3>
- Quesenberry, J. L., & Trauth, E. M. (2012). The (Dis)Placement of Women in the IT Workforce: An Investigation of Individual Career Values and Organisational Interventions. *Information Systems Journal*, 22(6), 457-473. <https://doi.org/10.1111/j.1365-2575.2012.00416.x>
- Reid, M. F., Allen, M. W., Armstrong, D. J., & Riemenschneider, C. K. (2010). Perspectives on Challenges Facing Women in IS: The Cognitive Gender Gap. *European Journal of Information Systems*, 19(5), 526-539. <https://doi.org/10.1057/ejis.2010.30>
- Richardson, L., & Bissell, D. (2019). Geographies of Digital Skill. *Geoforum*, 99, 278-286. <https://doi.org/10.1016/j.geoforum.2017.09.014>
- Riemenschneider, C. K., Armstrong, D. J., Allen, M. W., & Reid, M. F. (2006). Barriers Facing Women in the IT Work Force. *The Data Base for Advances in Information Systems*, 37(4), 58-78. <http://dx.doi.org/10.1145/1185335.1185345>
- Riemenschneider, C. K., Armstrong, D. J., & Moore, J. E. (2009). Meeting the Demand for IT Workers: A Call for Research. *European Journal of Information Systems*, 18(5), 458-461. <https://doi.org/10.1057/ejis.2009.36>
- Sarker, S., Xiao, X., & Beaulieu, T. (2013). Qualitative Studies in Information Systems: A Critical Review and Some Guiding Principles. *MIS Quarterly*, 37(4), iii-xviii. <https://www.jstor.org/stable/43825778>
- Schmitt, N., Oswald, F. L., Friede, A., Imus, A., & Merritt, S. (2008). Perceived Fit With an Academic Environment: Attitudinal and Behavioral Outcomes. *Journal of Vocational Behavior*, 72(3), 317-335. <https://doi.org/10.1016/j.jvb.2007.10.007>
- Schwarz, A., Chin, W. W., Hirschheim, R., & Schwarz, C. (2014). Toward a Process-Based View of Information Technology Acceptance. *Journal of Information Technology*, 29(1), 73-96. <https://doi.org/10.1057/jit.2013.31>
- Stage, F. K. (1989). Motivation, Academic and Social Integration, and the Early Dropout. *American Educational Research Journal*, 26(3), 385-402. <https://doi.org/10.3102/00028312026003385>
- Stanton, A. L., Kirk, S. B., Cameron, C. L., & Danoff-Burg, S. (2000). Coping Through Emotional Approach: Scale Construction and Validation. *Journal of Personality and Social Psychology*, 78(6), 1150-1169. <https://doi.org/10.1037/0022-3514.78.6.1150>
- Stich, J.-F., Tarafdar, M., Stacey, P., & Cooper, C. (2019). Appraisal of Email Use as a Source of Workplace Stress: A Person-Environment Fit Approach. *Journal of the Association for Information Systems*, 20(2), 132-160. <http://dx.doi.org/10.17705/1jais.00531>
- Struthers, C. W., Perry, R. P., & Menec, V. H. (2000). An Examination of the Relationship Among Academic Stress, Coping, Motivation, and Performance in College. *Research in Higher Education*, 41(5), 581-592. <http://dx.doi.org/10.1023/A:1007094931292>
- Tinto, V. (1975). Dropout From Higher Education: A Theoretical Synthesis of Recent Research. *Review of Educational Research*, 45(1), 89-125. <https://doi.org/10.3102/00346543045001089>
- Tracey, T. J.G., & Robbins, S. B. (2006). The Interest-Major Congruence and College Success Relation: A Longitudinal Study. *Journal of Vocational Behavior*, 69(1), 64-89. <https://doi.org/10.1016/j.jvb.2005.11.003>
- Trauth, E. M. (2013). The Role of Theory in Gender and Information Systems Research. *Information and Organization*, 23(4), 277-293. <https://doi.org/10.1016/j.infoandorg.2013.08.003>
- Trauth, E. M., Quesenberry, J. L., & Huang, H. (2009). Retaining Women in the U.S. IT Workforce: Theorizing the Influence of Organizational Factors. *European Journal of Information Systems*, 18(5), 476-497. <https://doi.org/10.1057/ejis.2009.31>

- Truman, G. E., & Baroudi, J. J. (1994). Gender Differences in the Information Systems Managerial Ranks: An Assessment of Potential Discriminatory Practices. *MIS Quarterly*, 18(2), 129-142. <https://doi.org/10.2307/249761>
- U.S. Equal Employment Opportunity Commission (2024). *High Tech, Low Inclusion - Diversity in the High Tech Workforce and Sector 2014-2022*. [https://www.eeoc.gov/sites/default/files/2024-09/20240910\\_Diversity%20in%20the%20High%20Tech%20Workforce%20and%20Sector%202014-2022.pdf](https://www.eeoc.gov/sites/default/files/2024-09/20240910_Diversity%20in%20the%20High%20Tech%20Workforce%20and%20Sector%202014-2022.pdf)
- Venkatesh, V., Windeler, J. B., Bartol, K. M., & Williamson, I. O. (2017). Person-Organization and Person-Job Fit Perceptions of New IT Employees: Work Outcomes and Gender Differences. *MIS Quarterly*, 41(2), 525-558. <http://dx.doi.org/10.25300/MISQ/2017/41.2.09>
- Wessel, J. L., Ryan, A. M., & Oswald, F. L. (2008). The Relationship Between Objective and Perceived Fit With Academic Major, Adaptability, and Major-Related Outcomes. *Journal of Vocational Behavior*, 72(3), 363-376. <https://doi.org/10.1016/j.jvb.2007.11.003>
- Wilcox, P., Winn, S., & Fyvie-Gauld, M. (2005). "It Was Nothing to Do With the University, It Was Just the People": The Role of Social Support in the First-Year Experience of Higher Education. *Studies in Higher Education*, 30(6), 707-722. <https://doi.org/10.1080/03075070500340036>
- Wingreen, S. C., & Blanton, J. E. (2017). IT Professionals' Person-Organization Fit With IT Training and Development Priorities. *Information Systems Journal*, 28(2), 294-317. <https://doi.org/10.1111/isj.12135>
- Zhang, W. (2007). Why IS: Understanding Undergraduate Students' Intentions to Choose an Information Systems Major. *Journal of Information Systems Education*, 18(4), 447-458. <http://jise.org/Volume18/n4/JISEv18n4p447.pdf>

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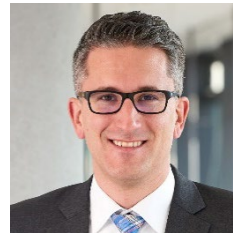
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## APPENDICES

### Appendix A. Data Sample

Pseudonym	Age	University	Study program	Enrolment period
Ava	25	B	Master	3 semesters
Bell	26	B	Master	4 semesters
Cala	22	B	Bachelor	6 semesters
Dora	23	B	Bachelor	7 semesters
Elli	25	B	Bachelor	8 semesters
Fran	22	B	Bachelor	7 semesters
Gal	26	B	Master	1 semester
Hali	24	B	Master	2 semesters
Ida	25	B	Master	2 semesters
Jill	21	B	Bachelor	4 semesters
Kim	21	B	Bachelor	2 semesters
Lana	25	B	Dropout	3 semesters*
Mara	23	A	Bachelor	7 semesters
Nici	25	B	Bachelor	7 semesters
Olya	22	B	Bachelor	2 semesters
Perl	23	B	Bachelor	2 semesters
Quinn	19	B	Bachelor	2 semesters
Rose	24	B	Bachelor	7 semesters
Sara	21	C	Bachelor	4 semesters
Tess	23	B	Bachelor	8 semesters
Una	22	B	Bachelor	8 semesters
Vivi	25	B	Bachelor	5 semesters
Wynn	22	B	Bachelor	3 semesters
Xena	23	B	Bachelor	3 semesters
Yola	25	D	Dropout	2 semesters*
Zoe	26	B	Bachelor	8 semesters
Arya	24	B	Master	3 semesters
Bree	22	B	Bachelor	7 semesters
Cleo	26	B	Dropout	3 semesters*
Dani	26	B	Bachelor	6 semesters
Emma	25	B	Dropout	4 semesters*

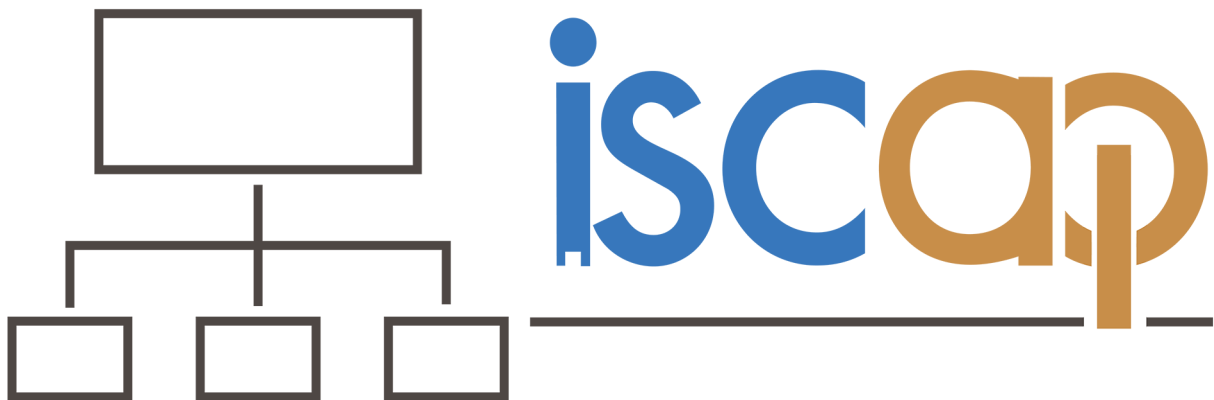
\* Indicates the semester in/after which the interviewee dropped out.

**Appendix B. Overview of Interviewee Mentions According to Data Structure**

	Interviewees															
Manifestation	Ava	Bell	Cala	Dora	Ellie	Fran	Gal	Hali	Ida	Jill	Kim	Lana	Mara	Nici	Olya	Perl
<i>Fit perception</i>																
Person-major fit	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x
Person-university fit	x		x					x								
Person-group fit								x	x		x	x				x
Person-vocation fit	x	x	x	x	x	x	x	x				x		x		x
Person-job fit																
<i>Stressor</i>																
Academic	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Social	x		x	x	x				x	x		x	x		x	x
<i>Appraisal</i>																
Manageability		x				x		x	x	x	x					
Non-manageability	x		x	x	x		x					x	x	x	x	x
Fit questioning	x		x	x	x		x					x	x	x	x	x
<i>Coping</i>																
Problem-focused	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x
Emotion-oriented	x		x	x	x	x						x			x	x
<i>Reappraisal</i>																
Overcoming	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x
Fit confirmation	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x
Non-overcoming												x				
Fit non-confirmation												x				
<i>Career outcome</i>																
Persistence	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x
Turnaway												x				

	Interviewees														
Manifestation	Quinn	Rose	Sara	Tess	Una	Vivi	Wynn	Xena	Yola	Zoe	Arya	Bree	Cleo	Dani	Emma
<i>Fit perception</i>															
Person-major fit	x	x	x	x	x	x	x	x	x	x	x		x	x	x
Person-university fit	x		x			x	x				x	x		x	x
Person-group fit		x		x	x						x				
Person-vocation fit			x	x	x		x	x		x	x	x	x		x
Person-job fit	x	x													
<i>Stressor</i>															
Academic	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Social						x	x		x	x					x
<i>Appraisal</i>															
Manageability								x	x		x	x		x	
Non-manageability	x	x	x	x	x	x	x		x	x			x		x
Fit questioning	x	x	x	x	x	x	x			x			x		x
<i>Coping</i>															
Problem-focused	x	x	x	x	x	x	x		x	x	x	x	x	x	x
Emotion-oriented		x	x	x		x	x			x			x		x
<i>Reappraisal</i>															
Overcoming	x	x		x	x	x	x	x	x	x	x	x		x	
Fit confirmation	x	x		x	x	x	x	x	x	x	x	x		x	
Non-overcoming			x										x		x
Fit non-confirmation			x										x		x
<i>Career outcome</i>															
Persistence	x	x		x	x	x	x	x	x	x	x	x		x	
Turnaway			x										x		x

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