**"Not extroverted, but not introverted as well" - A qualitative analysis of personality traits in the construction of identity among emerging adults**

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**Abstract**

The aim of this thesis was to qualitatively analyze how emerging adults are constructing their identities through the use of  the Big Five personality traits, namely extroversion, openness to experience, agreeableness, conscientiousness, and neuroticism, and introversion, in verbal self-descriptions. Identity construction is the process of integrating multiple parts of one's self into a single coherent unit. In order to express and understand their identities, individuals identify themselves with different categories, which can be represented by personality traits. 115 first year psychology students were placed alone in experimental rooms and recorded while asked to describe themselves for three minutes. Transcripts of the recordings were subject to Iterative Micro-Content Analysis, which identified the participants that used personality traits in their self descriptions, the prevalence of each personality trait in the transcripts, and found three patterns across the transcripts: extroversion and introversion as identification and attributes, extroversion and introversion as dimensions, and elaboration on openness to experience. The results illustrated how the personality traits were actively reflected and elaborated on, in order to be integrated in the participants' identities.

*Keywords:* personality traits, identity construction, identity content, emerging  adults

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One of the most challenging and central preoccupations that young adults are dealing with is constructing their identity. Identity development is a process that is highly intensified during adolescence and it reaches its peak in emerging adulthood (Arnett, 2015; McLean & Syed, 2016), but identity formation lasts a lifetime (Bosma & Kunnen, 2001; Erikson, 1968). According to Shell et al. (2020), emerging adults are steadily preoccupied with identity exploration and commitment during their first year of university, but its development is not completed by the end of the last academic year. Identity can be broadly defined as a person's "sense of sameness and continuity as organized by the self and recognized by others" (Johnson et al., 2022, p. 737) and it involves complex inferences about multiple life domains, such as gender and sexual identity, religion, social roles, and personal and professional interests. Furthermore, the domains representing identity content can be grouped in two categories: ideological, including religion, occupation, values, and interpersonal, including romance, friends, family, gender (Galliher et al., 2017; Johnson et al., 2022). Research on identity development has focused on two major aspects: the processes involved in identity formation, described as the "how" of identity development, and identity content, "what" identity actually consists of (Galliher et al., 2017).

**Identity development**

In order to integrate the general definition of identity and its various domains, Galliher et al. (2017) proposed a multilevel model, incorporating the levels of culture, social roles, domains and everyday experiences. The levels created a framework of how identity is developed, starting from the broad influence of culture and history on someone's identity, to defining one's social roles in their environment, to fitting aspects of identity content within specific domains, and, lastly, integrating them into everyday life. Cultural and historical

contexts refer to beliefs, practices and structural changes that have a strong impact on identity development, and they define and give meaning to the second level of the model, social roles. Social roles become ingrained in identity as labels, such as spouse, father etc., and they are mostly defined by one's relationships to others. The third level of analysis describes how identities are developed through and within domains. There are certain domains which appear to be more salient than others in individuals' lives and identities, and these domains differ from person to person. Lastly, the fourth level of analysis, enacting identity in everyday interactions, refers to what life generally looks like for individuals with certain identity structures, and how other levels manifest themselves in daily life experiences. Culture, being the broadest factor in the multilevel model, is an important component in framing the development of the more proximal levels. As opposed to other domains which are "entirely self-chosen and self-determined" (Galliher et al., 2017, p. 2015), social roles are defined by one's environment and they are integrated into an individual's identity, being difficult to change throughout life. Since culture is the level that dictates the values of social roles, it is one of the most important factors that guide the path on which identity is formed.

The connection between culture and identity can be explained by the concept of master narratives (Galliher et al., 2017). These are the stories shared within a culture that help structure society by defining what it means to be an adequate member of it (McLean & Syed, 2016). In this context, the definition of culture is broad, referring to a variety of groups, from large societies (e.g. Europeans), to sub-cultures within a greater one (e.g. Dutch citizens), and to small groups, such as families (Cohen, 2009). As individuals become aware of the master narratives corresponding with their environment, they also begin constructing a personal narrative of their own (McLean & Syed, 2016). Depending on the extent to which one identifies with the master narratives, they can negotiate and internalize them into their identity. However, those who do not resonate with the master narratives, might identify with

an alternative narrative. From the perspective that identity can be defined as a story of how an individual becomes who they are (McAdams, 2013), master narratives have a significant role in the construction of identity by strongly influencing development (McLean & Syed, 2016). Individuals become aware of the master narratives from their culture from middle childhood, gaining a perspective of how their lives should unfold according to the environment around them. A large part of their identity is constructed depending on their position towards master narratives and whether they internalize them or adopt an alternative narrative.

**Membership categorization**

When being confronted with presenting their identity to an audience, individuals use various membership categorizations in social interactions as a means to portray themselves (Stokoe, 2010). Membership categories are used by people to understand themselves better and to present and explain themselves to others. They are inherently prone to stimulating us to make inferences about the world around us (Stokoe, 2003). Moreover, members of the same society tend to perceive and understand categories and how they function in a highly similar way . For instance, due to the general traits specific of extroversion, such as high sociability, high energy and involvement in social interactions (Choi & Kwon, 2021), this trait is associated with social desirability and individuals tend to be more agreeable towards those who would identify as extroverts (Gangloff et al., 2011). In this way, we can understand how people use these specific labels to associate themselves with a category, which comes with certain assumptions and expectations from society.

**Personality traits**

It can be argued that individuals use the concept of personality to express their identities, as a form of categorization and self-understanding. The most common conceptualization of personality traits is the Big Five model, which includes the traits *extroversion*, *neuroticism*, *conscientiousness*, *agreeableness* and *openness to experience*

(Goldberg, 1990). These personality traits, which are merely "descriptive summaries of attributes of persons" (Larsen, 2017, p. 98), manifest through specific behaviors and acts. However, it is not necessary for characteristic behaviors to occur in order for a person to possess the corresponding trait. According to Norman's markers for the Big Five factor model (Larsen, 2017), individuals who are high on *extraversion* can be talkative, sociable, adventurous and open. People who are high in *agreeableness* tend to be good-natured, cooperative, mild and gentle, whilst those who are high in *conscientiousness* can be responsible, scrupulous, persevering and tidy. Moreover, individuals high on *neuroticism* are thought to be anxious, excitable, hypochondriacal and nervous. Lastly, those high on *openness to experience* can be intellectual, artistic, imaginative and refined.

**Identity and talk**

Identity construction is a process that can be observed in daily interactions through talk (Klimstra et al., 2010). Identity is verbally expressed through claims, which can be either explicit or implicit (Gmelin & Kunned, 2021). Implicit claims directly identify the speaker with a specific category by naming it, whilst explicit claims associate the speaker with a category through the use of related attributes. In this case, one would use attributes specific for a category in order to identify with it, without naming the category directly. From a social constructivist perspective, interactions facilitate identity construction, as identity statements can change during conversations. Identities are constructed and maintained through repeated development and negotiations. When expressing their identities to an audience, individuals can evaluate how their identity is perceived by their peers through their reactions. Based on this evaluation, people can further adapt and construct their identity (Hellinger & Schachter, 2021). Therefore, we can observe identity formation as it happens through conversations, on a micro-level. Contrastively, identity change on a macro-level occurs over a long period of time and it can be observed, for instance, throughout all of adolescence.

**Current study**

Previous research has extensively examined identity development (Erikson, 1968; Galliher et al., 2017; Johnson et al., 2022) and there is a current focus on real-time identity formation (Hellinger & Schachter, 2021; Gmelin & Kunned, 2021). Moreover, it has been investigated how different personality traits in individuals influence the way they construct their identities (Klimstra et al., 2013). However, there is a gap in the academic literature on the role that personality traits have in the verbal expression of identity. The aim of the current study is to analyze how identity is constructed in real time self-descriptions through the use of personality traits. For the purpose of our research we asked 130 first year psychology students to verbally describe themselves for three minutes and recorded their speeches. These descriptions were realized without the presence of the experimenter, or any other second party. The recordings were transcribed, coded and analyzed according to the Iterative Micro-Identity Content Analysis (IMICA) (Gmelin & Kunnen, 2021). The study firstly aimed to assess whether the participants would use personality traits to describe themselves. Furthermore, it was qualitatively analyzed whether there were any patterns that could have been distinguished in how the participants expressed their identities.

**Method**

**Participants**

In this study, a total of 115 participants ($N$ = 62 women, 53 men)have taken part (*mean age* = 20.6; *sd* =2.029; *age range* = 18-28). Data from one participant were excluded, due to it being incomplete. Participants were recruited from undergraduate psychology courses, and they earned course credits for their participation.

**Procedure**

Prior to the study, participants were asked for permission for their data to be used anonymously and securely. Their informed consent was acquired through a form, which

included information about the research procedure and about their rights as a research participant, including their right to withdraw from the study at any point in the process. Thereafter, the actual research procedure could start, which was structured along three different phases.

The first phase of the study consisted of participants verbally describing themselves for three and a half minutes using a microphone headset connected to a computer where the statements were recorded. Participants were asked to start speaking freely ten seconds after the recording started, so that the researcher present could leave the experiment room and give the participants the privacy to self-disclose. Participants could say anything that came to mind that was connected to themselves. We used the recorded narratives collected in this phase of the study as the data for our current research. It must be mentioned that, prior to phase one, the participants were aware that they, as well as the researcher, would listen to their self-descriptions after recording them.

In the following two phases, the participants were asked to participate in some follow-up measuring tasks regarding their feelings about their self-descriptions of the first phase, and regarding their feelings about themselves in more general terms. In the second phase, participants were given the task to listen to their self-descriptions and to indicate how they felt during the moment of expression. For this purpose, the Mouse Paradigm was used (Vallacher et al., 2002), which allowed participants to evaluate their feelings of each self-description along a continuum from positive to negative. In the third phase, the Rosenberg self-esteem scale was introduced to the participants (Rosenberg, 1965). After the study, participants were informed about the true purpose of research, which was deliberately withheld prior to the study.

**Data preparation**

The self descriptions given by participants were firstly transcribed using online software. They were then uploaded to Atlas.ti. The coding of these transcripts took place in three stages. In the first stage all identity claims made by participants were selected, by coding these statements as being an identity claim. The research group was split into three sets of pairs. Each pair was assigned between 10 -13 transcripts to code. Coder 1 (C1) coded the first half of the transcripts and Coder 2 (C2) coded the second. Each identity claim was quoted and saved. C2 checked the transcripts that C1 had coded and vice versa.

The transcripts were cross checked to ensure there was interrater reliability and consistency in how the coding was conducted. If there was doubt or disagreement, the pair would revisit the coding manual and discuss it. In the event that the pair could not come to an agreement, the claim was recorded and discussed amongst the complete research group in the subsequent meeting, before reaching consensus. The coding manual was adjusted and embellished after each query was raised. Once the coding was completed, the quotes were imported to excel.

Each quote was then assigned a code categorizing the quote under a domain. The coding manual used for this is based on a narrative identity domains coding manual developed by McLean and Syed (2011). The coding manual can be found in the appendix. Coding of each identity claim was done in terms of the identity content domains that the claim is constructing. Identity content domains are split into relational categories and ideological categories. Both categories include more specific, in depth codes. To be coded as present, the domain has to be related to a central aspect of the claim, it can not be background information. Each single claim was coded with only one domain. This second stage was also completed in pairs, where C1 and C2 coded and checked claims, after which potential differences were discussed and resolved.

**Data analysis**

*Additional coding*

The main research question analyzed in this study is how people construct their identities through the use of personality traits. In order to answer the research question investigated in this paper, a specific code was introduced to classify the identity claims: "Personality traits". Each claim that contained one of the Big Five personality traits, namely "*openness to experience*", "*conscientiousness*", "*extroversion*", "*agreeableness*", "*neuroticism*", and, additionally, "*introversion*", was coded under the label "Personality traits". Claims that only referred to, but did not specifically name, the aforementioned traits were not coded. For instance, claims such as "I am very closed person" and "I consider myself a sociable person, very outgoing" were not labeled as "Personality traits". After our group of six coders identified and coded all the identity claims for the common part of our research, three of us reviewed all the transcripts again and coded the claims necessary to our individual research questions, including those containing personality traits. Lastly, after the coding was finalized, we checked the claims marked for this research topic and deleted the ones that had been mistakenly coded with the label "Personality traits". Some of the deleted claims included: "I would describe as open minded".

*Analysis*

"Personality traits" represented the variable for the first part of the analysis in this research paper. The first step of the analysis was to establish how many participants used personality traits in their self descriptions, and then, how many times each of the six traits was used in the data. In a subsequent step, we tabulated the frequency of a personality claim co-occurring within each individual transcript. This part of the analysis was of a more quantitative nature, whilst the following investigated the data from a qualitative perspective. An identification of patterns started with the reading and re-reading of transcripts. In the second step of the qualitative analysis we defined the patterns according to the claims from

the 30 selected transcripts. In order to establish the patterns we explored for claims where the participants explained why the traits represented them, how they connected with their identities, and what the traits meant for them.

## Results

### Descriptives

Out of the total number of 115 participants, 30 of them ($N$ = 16 women, 13 men; $M$ age = 20.51, $SD$ = 1.99, age range 18 - 27) used at least one of the six personality traits in their self-descriptions, representing 26.08% of the total amount of participants. The demographic data of participant 114 was lost, and, therefore, it was not included in the previous statistics. On average, each of the 30 participants used 1 personality trait ($M$ = 1.3, $SD$ = 0.65) in their self descriptions. In total, six participants used more than one trait in their transcripts: three of them used two personality traits concomitantly, and three used two traits.

### Quantitative analysis

**Figure 1**

*Count of personality traits used*
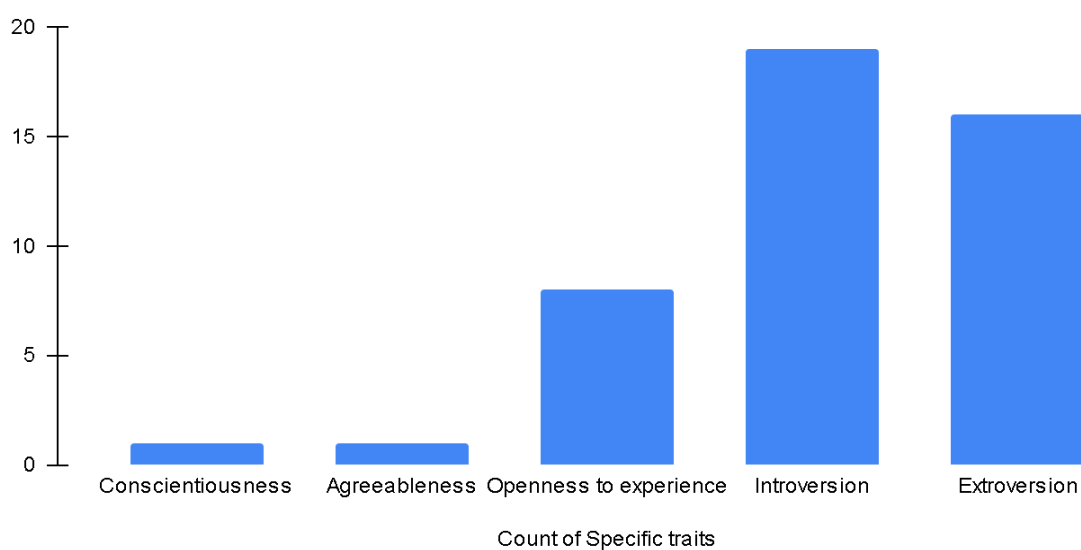
*Note.* The bar graph above shows the count for each of the variables *extroversion, introversion, openness to experience, agreeableness,* and *conscientiousness* in all of the transcripts.

As it can be observed in Figure 1, the most commonly used trait was *introversion*, and it was mentioned 19 times. Following, *extroversion* was the second most used trait, and it was encountered 16 times. *Openness to experience* was used 8 times in the transcripts. *Agreeableness* and *conscientiousness* were each used only one time, and there was no mention of *neuroticism* in the self descriptions.

Overall, out of the 30 participants that included personality traits in their speech, six of them used more than one personality trait concomitantly in their self descriptions. The traits *introversion*, *extraversion* and *openness to experience* co-occurred in the transcripts of two participants. An example that can illustrate this is from the transcript of participant 19: "I'm quite in the middle of more an introvert, an extrovert. But I guess I also really like to go to parties and talk to people, I'm really open to experience like we've learned in the five types of personality thing there.". The traits *introversion* and *extroversion* were used together by three of the participants, as it can be seen in the following example: "I would say I have more of an introvert personality but want to be more extrovert because I feel like that's the thing deep inside me.". Finally, one participant used the traits *agreeableness*, *conscientiousness* and *introversion* altogether in their transcript: "Yeah. I'm quite agreeable. I'm conscientious. Um, but maybe more on the introverted side.".

**Qualitative analysis**

The qualitative analysis found three patterns across the 30 transcripts in the data. The first was *extroversion and introversion used as identification and attributes*, the second was *extroversion and introversion used as dimensions*, and the third was *elaboration on openness*

*to experience*. The traits *agreeableness* and *conscientiousness* were only used by one participant, making it difficult to establish a pattern about them. The first pattern, *extroversion and introversion used as identification and attributes*, occurred in 19 of the transcripts. Specifically, these two traits were used by the participants either as a means of identification, or they rather used an attribute in order to implicitly identify with that trait.

Firstly, the trait *extroversion* was generally used in two ways in our data. It was used 10 times by participants to straightforwardly identify, or, in some cases, to rather not identify with this trait: "I am an extravert", "not extroverted". These participants used the trait *extroversion* as a means of categorisation, as a label they identified themselves with, and, thus, with the group of people that fit into this category. From the way they expressed themselves, using "I am" statements, it could be argued that *extroversion* is a part of the identity of these participants. On the other hand, some participants used attributes as a means to identify with the membership categories associated with *extroversion*. In these cases, the associations of participants with *extroversion* are implied through the use of attributes related to this category. The attributes used have the purpose of constructing the identities of the participants by associating them with actions, characteristics and values. Secondly, the trait *introversion* was used in the data in a highly similar way to *extroversion*. Some participants used it as a label and identified themselves as introverted: "Well, I already said I'm an introvert.". Others used the trait as a contrast to their identity and verbally did not identify with it: "I wouldn't say I'm introverted". Identification with the trait also happened implicitly in the transcripts, through the use of attributes. For example, participant 13 explicitly described themselves as *introverted*, but also used attributes to identify with category: "as well I like to be alone. So I really need my privacy.".

"So I, I mostly just like I hung out with a couple of friends a lot and then I didn't really go to a lot of parties and stuff, which is due to me being quite shy. And then when I'm comfortable with people, I'm completely different. At work I get told I'm way too energetic, but I have fun at work and I enjoy it because of that. And that makes me more extroverted, I guess. Other than that I'd say I'm friendly to most people unless they wrong me." (Participant 71, 21 years old)

The most commonly found pattern was *extroversion and introversion as dimensions.* These two personality traits represented two opposite ends of one dimension. The participants that used them together appeared to have used these extremes to explain themselves as neither or both: "not extroverted, but not introverted as well.". They generally describe themselves as oscillating from one side to the other and being somewhat in between *introversion* and *extroversion*. These descriptions were more complex than the straightforward identification with each trait described in the previous pattern: "I'm an extrovert.". The participants tended to discuss the oscillation between *extroversion* and *introversion* in more detail, explaining their reasonings and what the duality means to them: " I'm more, uh, like a balance of extrovert, uh, to introvert because, well, sometimes I'm really outgoing, but it really depends on the situation, like in a group full of people a more, uh, on the background.".

"I would say I have more of an introvert personality but want to be more extrovert because I feel like that's the thing deep inside me. But through anxiety and sometimes depression, it doesn't always come out. But I want to be more extrovert. And. That's me. Outgoing social, but a bit lazy." (Participant 83, 21 years old)

Regarding the trait *openness to experience*, a distinct pattern was observed in the way the participants include this trait in their self-descriptions: *elaboration on openness to experience*. Whenever they have mentioned the trait, they explained what it meant for them, whether it be how this trait is portrayed in their behaviors, how it developed within their identity or simply how they understood it. This pattern can be observed the best in the claims: "Um, I think I'm really open to new experiences since I came here. I think I've really developed and I'm really open to new experience now", "open minded, uh, to basically new experiences. I don't have a problem with changes.".

As it was previously stated, the traits *agreeableness* and *conscientiousness* were used only once in the entire data and by the same participant. Since only one participant used these traits, it cannot be said with certainty if there was a pattern in how individuals talk about *agreeableness* and *conscientiousness*. The participant was very clear and straightforward in affirming that he identifies with these traits. This could be observed in the short sentences they used to make these affirmations, which they did not elaborate on at all: "I'm conscientious.", "I'm quite agreeable.". However, the participant's statement about *introversion*, "maybe more on the introverted side" was categorized in the second pattern, *extroversion and introversion as dimension*. Even though they did not include *extroversion* in their statements, the phrase "introverted side" indicated the idea of a dimension where the participant can be situated.

### Discussion

The aim of this study was to examine how individuals construct their identities through the use of personality traits. In order to scientifically investigate this topic, we analyzed the self descriptions of a sample of psychology university students, identified those who included personality traits in their speech, and found patterns in the way they mentioned them. Identity development is a process that becomes highly intensified during emerging

adulthood, when identity exploration and commitment becomes one of the main preoccupations of young adults (Shell et al., 2020). Identity construction consists of integrating different parts of oneself, some which may appear as opposite or contradicting, into a coherent unit, creating a sense of sameness and continuity within an individual (Hellinger & Schachter, 2021). As humans have new experiences and interactions in their lives, they reflect upon themselves, making the process of forming their identity an ongoing lifelong process (Bosma & Kunnen, 2001; Erikson, 1968; Hellinger & Schachter, 2021), which can be observed on a macro-level or a micro-level (Hellinger & Schachter, 2021). Individuals use different membership categorizations in order to express their identities (Stokoe, 2003), and personality traits can be interpreted as a membership category.

**Findings**

The first finding identified after examining the data was that participants used personality traits in their self-descriptions as a means to express their identities. Specifically, the current study investigated the use of the Big Five personality traits and *introversion*. Out of the six personality traits, *neuroticism* was the only one that was not mentioned by any of the participants. This finding can be explained by the outcomes of the studies conducted by Francis (1993) and Dunnett et al. (1981). Their research studies found that high levels of *neuroticism* are perceived as socially undesirable and unattractive. This suggests that individuals might not self-report as being *neurotic*, because it would make them appear as socially undesirable for others. This result suggests that individuals use personality traits as membership categorisations, according to the multiple findings of Stokoe (2003, 2010).

The second finding of our research consisted of two patterns within the transcripts: *extroversion and introversion used as identification and attributes*, and *extroversion and introversion used as dimensions*. The theory discussed by Schachter (2015) about explicit identity claims matched the first pattern found in our research paper, namely that extroversion

and introversion were used as means of identification. In this case, the participants in our study named and used *extroversion* and *introversion* to describe themselves. Additionally, *extroversion* and *introversion* were used implicitly and described in terms of attributes, as it was explained by Gmelin & Kunnen (2021) in their research paper. They illustrated that identity can be expressed through attributes that describe membership categories or that are associated with them. This fits with our findings and the way that participants elaborated on how *extroversion* and *introversion* were parts of their identities by using claims which described behaviors, related psychological traits and values. The second pattern that was found, *extroversion and introversion used as dimensions*, consisted of participants which used both traits in order to describe themselves. In these cases, the participants positioned themselves as oscillating between the two extremes, or somewhere on the dimension created by them. This pattern is in line with the findings from the study by Stokoe (2003), which described contradictory categories as "imbued with meaning in interactions contexts" (p. 338) that people use, regardless of the way others would perceive this duality. Moreover, integrating two opposite categories, such as extroversion and introversion, into one fits with the definition of identity construction elaborated by Hellinger & Schachter (2021) that even conflicting aspects of identity should merge into a single coherent unit.

The third finding from our study was the pattern *elaboration on openness to experience*. In contrast to the way the other traits were used, the same pattern was found for each time *openness to experience* was included in the self-descriptions. Namely, the participants explained how the trait fit into their identity and what it meant for them. Sugimura et al. (2022) came across similar results in their study that investigated identity exploration. Specifically, the transcripts that included *openness to experience* illustrated multiple patterns of exploration as it was conceptualized in the paper, such as reflecting, listing different ideas and elaboration. The pattern found in our research is similar to the

pattern "Clarification and elaboration embedded in support" (Sugimura et al., 2022, p.30), which was essentially characterized by how elaboration led to the establishment of identity components. Since our study did not involve interactions between participants, or researchers and participants, the factor of social support could not be established, and clarification was perhaps more difficult for our participants to achieve, considering that they did not have a partner in conversation to face them with questions or to stimulate them for further clarification.

**Implications**

Through this paper, we strived to gain a better understanding of the way people use personality traits in order to express their identities, providing insights into how people construct their identity content. Previous research studied how identity is constructed in real time on micro-levels (Gmelin & Kunnen, 2021; Gmelin & Ruiter, 2021; Hellinger & Schachter, 2021; Sugimura et al., 2022) and identity has been conceptualized extensively in the academic field (Johnson et al., 2022), building upon the foundations of identity development theories (Erikson, 1950; Erikson 1986). Moreover, studies have researched how certain personality traits influence the way in which individuals form their identities (Klimstra et al., 2013). However, there is a gap in research regarding the way in which individuals use personality traits in order to describe themselves.

We found that a large number of participants used the traits *extraversion*, *introversion*, *agreeableness*, *conscientiousness*, and *openness to experience* to describe themselves and we were able to identify patterns in how they chose to express these aspects of themselves. Stokoe (2003, 2010) examined how people use membership categorization in order to express themselves. Our research built on her findings by focusing on a particular category, namely, personality traits. Specifically, we found individuals tended to use *introversion* and *extroversion* as attributes or means of identification through implicit or explicit claims, and

*openness to experience* was explored through elaboration. *Extroversion* and *introversion* were also used together in transcripts, and they represented two ends of a spectrum on which the participants positioned themselves. Finding that a large percentage of individuals used personality traits in order to describe themselves implies that personality is a core component of identity construction, and identity content. Thus, there should be more focus on the connections between identity and personality traits in research.

**Limitations and future research**

There were multiple limitations to our study which could have influenced the outcome of the analysis. However, these limitations could help improve future research in identity and its relation with personality. The first limitation addresses the general demographics of our sample, consisting of first year psychology students. Being their first year of university, they were exposed to large amounts of new people they had to introduce themselves to. Having to present themselves numerous times around the time the data was collected, talking about themselves might have become somewhat of a rehearsed script they constructed as an automatic mechanism. For our study, this would imply that, instead of reflecting and elaborating on their identity during the recordings, the participants might  have used the general speech they would have used in their everyday lives. In order to overcome this issue, future studies could make their samples more diverse by including more than first year students, or participants that are not in university.

Even though the study design was meant to replicate a context in which the participants would talk to themselves without the presence or response of a second party, it was apparent from some of the transcripts that the participants were aware that someone would be listening to the recordings of what they said, and they were addressing an imagined audience. This could be observed in multiple transcripts through the fact that participants describe themselves physically: "Im 19. I study Psychology at the university of Rug and ehm,

Im Im 1,69 Im weighing 57 kilos. I have curly hair, light skin, ehm, I am from eastern Europe and ehm what is it to came here and describe myself ". The physical description could imply that the participants considered this to be a component of their identities, or perhaps they felt the need to describe their appearance to somebody who will listen to the recordings, but will never see what they look like.

Lastly, the experiment task was formulated in English, and so were the verbal responses of the participants. However, the university program was an international one, and, thus, the majority of the participants were not native English speakers. Native English speakers are more proficient in understanding and expressing themselves in English, rather than non native speakers (Wigdorowitz et al., 2023). Therefore, the data might look different if each participant had the opportunity to speak in their mother tongue, in order to express themselves more accurately. In order to assess whether this was an issue for the accuracy of such studies, future research could investigate the differences in how native and non native English speakers express their identities.

**Conclusion**

This study's purpose was to examine how the personality traits *extroversion*, *introversion*, *agreeableness*, *conscientiousness*, *neuroticism*, and *openness to experience* were used in real time identity construction. This was accomplished by analyzing the transcripts of verbal self-descriptions completed by first year psychology students. We found that a large percentage of the participants did use personality traits in order to express their identities, but *neuroticism* was not used in the current data. Traits were used concomitantly by a few of the participants, the most commonly found co-occurrence being *extroversion* and *introversion*. Additionally, *openness to experience* was used alongside *introversion* and *extroversion* in some instances, and one participant used *agreeableness*, *conscientiousness* and *introversion* in their transcript. We were also able to identify patterns in the way the participants described

their sense of identity, namely, *extroversion and introversion as identification and attribute*, *extroversion and introversion as dimensions*, and *elaboration on openness to experience*. The results illustrated how the personality traits were actively reflected and elaborated on, in order to be integrated in the participants' identities. Our findings imply that personality traits should be studied more extensively in the future in the context of identity content and construction, as individuals find it to be a meaningful aspect for their understanding of themselves.

**References**

Arnett, J.J. (2015). Identity development from adolescence to emerging adulthood: What we know and (especially) don't know. In K. C. McLean & M. Syed (Eds.), *The Oxford handbook of identity development* (pp. 53-64). Oxford University Press.

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

Cohen, A. B. (2009). Many forms of culture. *American Psychologist, 64*(3), 194–204. https://doi-org.proxy-ub.rug.nl/10.1037/a0015308

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.* https://doi-org.proxy-ub.rug.nl/10.1080/15283488.2021.1969937

Dunnett, S., Koun, S., & Barber, P. J. (1981). Social desirability in the Eysenck Personality Inventory. *British Journal of Psychology, 72,* 19–26.

Erikson, E. H. (1950). *Childhood and society.* W. W. Norton Company.

Erikson, E. H. (1968). *Youth and Crisis*. W. W. Norton Company.

Francis, L. J. (1993). The dual nature of the Eysenckian Neuroticism scales: a question of sex differences? *Personality and Individual Differences*, *15,* 43–59.

Galliher, R. V., McLean, K. C., & Syed, M. (2017). An integrated model for studying identity content in context. *Developmental psychology, 53*(11). http://doi.org/10.1037/dev0000299

Gangloff, B., Gozo, Z., & Zamoşteanu, A. (2011). The value of information transmitted by the Big Five. *Cognition, Brain, Behavior: An Interdisciplinary Journal, 15*(1), 143–167.

Gmelin, J. O. H., & Kunnen, E. S. (2021). Iterative micro-identity content analysis: Studying identity development within and across real-time interactions. *Identity, 21*(4), 324-340. https://doi.org/10.1080/15283488.2021.1973474

Goldberg, L. R. (1990). An alternative "description of personality": The Big-Five factor structure. *Journal of Personality and Social Psychology, 59*(6), 1216–1229. https://doi-org.proxy-ub.rug.nl/10.1037/0022-3514.59.6.1216

Hellinger, R., & Schachter, E. (2021). Tracking real-time changes in configuring identity elements in a life-story interview: An exploratory case study. *Identity, 21*(4), 341-357. https://doi.org/10.1080/15283488.2021.1977131

Johnson, S. K., Odjakjian, K., & Park, Y. (2022). I am whatever I say I am: The salient identity content of U.S. adolescents. *Journal of research on adolescence, 32*(2), 737-755. https://doi.org/10.1111/jora.12721

Klimstra, T. A., Luyckx, K., Goossens, L., Teppers, E., & De Fruyt, F. (2013). Associations of identity dimensions with Big Five personality domains and facets. *European Journal of Personality, 27*(3), 213–221. https://doi-org.proxy-ub.rug.nl/10.1002/per.1853

Klimstra, T. A., Luyckx, K., Hale, W. A., III, Frijns, T., van Lier, P. A. C., & Meeus, W. H. J. (2010). Short-term fluctuations in identity: Introducing a micro-level approach to identity formation. *Journal of Personality and Social Psychology, 99*(1), 191–202. https://doi-org.proxy-ub.rug.nl/10.1037/a0019584

Kwon, C., & Choi, E. (2022). Extroversion and subjective well-being among Korean university students: The moderating role of Attachment. *Psychological Reports, 125*(2), 1068–1085. https://doi.org/10.1177/0033294121991828

Larsen. (2017). *Personality psychology: Domains of knowledge about human nature.* Mcgraw-hill Education.

McAdams, D. P. (2013). *The redemptive self: Stories Americans live by, Revised and expanded edition.* Oxford University Press.

McLean, K. C., & Syed, M. (2016). Personal, master, and alternative narratives: An integrative framework for understanding identity development in context. *Human Development, 58*(6), 318–349. https://doi-org.proxy-ub.rug.nl/10.1159/000445817

Schachter, E. P. (2015). Integrating "internal," "interactional," and "external" perspectives: Identity process as the formulation of accountable claims regarding selves. In K. C. McLean & M. Syed (Eds.), *The Oxford handbook of identity development.* (pp. 228–245). Oxford University Press.

Shell, M. D., Shears, D., & Millard, Z. (2020). Who am I? Identity development during the first year of college. *Psi Chi Journal of Psychological Research, 25*(2), 192–202. https://doi-org.proxy-ub.rug.nl/10.24839/2325-7342.JN25.2.192

Stokoe, E. (2010). Gender, conversation analysis, and the anatomy of membership categorization practices. *Social and Personality Psychology Compass, 4*(7), 428–438. https://doi.org/10.1111/j.1751-9004.2010.00261.x

Stokoe, E. H. (2003). Mothers, Single Women and Sluts: Gender, Morality and Membership Categorization in Neighbour Disputes. *Feminism & Psychology, 13*(3), 317–344. https://doi.org/10.1177/0959353503013003006

Sugimura, K., Gmelin, J. O. H., Gaag, van der, M. A. E., & Kunnen, E. S. (2022). Exploring exploration: Identity in real-time interaction among peers. *Identity, 22*(1), 17-34. https://doi.org/10.1080/15283488.2021.1947819

Wigdorowitz, M., Pérez, A. I., & Tsimpli, I. M. (2023). High-level listening comprehension in advanced english as a second language: Effects of the first language and inhibitory control. *Bilingualism: Language and Cognition*. https://doi-org.proxy-ub.rug.nl/10.1017/S1366728923000135

**Appendix**

**Coding Manual: Content Domains**

The following coding manual is based on a narrative identity domains coding manual

developed by McLean and Syed (2011). Each identity claim is coded in terms of the identity

content domains that the claim is constructing. To be coded as present the domain has to be

related to some central aspect of the claim, not just background information. One way to test

whether a content domain is present is to ask: "Would exchanging the domain content change

the claim?" Each claim should only be coded with one domain (though different extracts of

the same turn may have different domains assigned to them).

| **Relational Categories** | | | |
|---|---|---|---|
| For these categories to get coded as present the claim must address what "kind of person" is constructed within a specific domain. Claims that construct personal characteristics within a specific relational domain are often coded as "personal". This means that the relational domain should be the content, rather than the context of a claim. Recall that to determine if this category is present, ask yourself if the other person is replaced with someone else (e.g. mother for friends) does the claim change? If not, do not code the category as present. The questions provided are not exclusive and may be suitable across domains. | | | |
| **Dating** | **Family** | **Friends** | **Sex Roles (Gender)** |
| This category is defined as dating and sexuality negotiations. Claims can inform about relevant identity categories (i.e. relationship status, sexual identity, being "a virgin", etc.). | This category focuses on claims about family, both biological and chosen and includes positive or negative aspects. Claims can address identity categories (i.e. child, mother, sister). | This category is related to friends and peer groups. These can be claims about relevant identity categories (i.e. friend, best friend, etc.) Claims may address questions such as: | This category captures claims that address expectations for behavior and attitudes, that are based on gender, as well as claims about gender stereotypes. Claims may address identity categories |

| | | | |
|---|---|---|---|
| Claims may provide answers to questions such as:<br><br>*What kind of person is the speaker…*<br>  - *in regard to dating*<br>  - *as a partner*<br>  - *when it comes to sexual encounters*<br>*What is important to the speaker…*<br>  - *regarding love, romance, dating, and desire*<br>  - *in a sexual/romantic partner*<br>*What does it mean to be single/LGB/in an open relationship?* | Claims may address questions such as:<br><br>*What does it mean to be a son/sibling/grandchild/parent?*<br><br>*How does the speaker feel about their familial relationships?*<br><br>*What was the speaker's life like growing up?*<br><br>*What is the configuration of the speaker's family?* | *What kind of friend is the speaker?*<br><br>*What does the speaker value in friendships?*<br><br>*How would others describe the speaker as a friend?*<br><br>*What are friendship rituals?*<br><br>*What characterizes the speaker's friendships?* | (i.e. woman, guys, chicks, etc.).<br><br>*What does it mean to be a man/woman/trans?*<br><br>*What is the importance of gender in the speaker's life?*<br><br>**Tip:** If exchanging the gender of the speaker (or who is spoken about) makes a difference, sex roles should be coded. |

**Ideological Categories**

For these categories to get coded as present the claim must be related to the speaker, in terms of their own attributes, characteristics, or values. To determine the presence of this category, ask yourself what the identity issue at stake is. Occasionally, speakers will construct claims that provide information on issues such as "values" in a relational domain ("It's important to

me that my boyfriend is honest with me") - these should be coded as relational (i.e. Dating). In contrast, claims which extend beyond the specific relational context are coded as ideological ("Honesty is really important to me, especially in a boyfriend").

| Personal | | Politics | Recreation |
|---|---|---|---|
| *Values, Principles & Insight* | *Characteristics* | | |
| **Values:** Claims that focus on the development, questioning, or elaboration of personal values, or negotiation with a larger (someone else's) value system. **Principles:** *Personal ideals, what is important for a (good) life, general life rules, personal satisfaction.* | This category is coded when a claim describes the speaker's self-image in terms of characteristics, personality traits, or traits: *Mental well/ill-being, or personality traits (extraversion, reliability, etc.), preferences, as well as typical behaviors or actions.* | Captures claims that address political issues at a very local level (e.g. school elections) to a very distal level (federal politics). *What is the political identification of the speaker (also in terms of left/right/woke/ etc.)? What is the role of politics in the life of the speaker?* | To be coded a claim should include a kind of activity or describe what the speaker enjoys [...]. *What does the speaker do for fun? What does define the speaker in the domain of 'leisure'?* |
| | | **Religion** | **Occupation/Education** |
| **Insight:** *Realizations, insights, and reflections about the speaker.* *- What is important to a good life?* | **Demographics:** *Demographic information (living situation, nationality, age).* | *What does it mean to be a muslim/Christian/Sikh /atheist?* | Claims that emphasize engaging in experiences that give reporters clarity about what |

| | | | |
|---|---|---|---|
| *- What characterizes a "good" person?*<br>*- What behavior is characteristic of the speaker?* | *- What is characteristic about the speaker?*<br>*- What would someone need to know, to really know the speaker?*<br>*- How does the speaker view themselves/how would others describe them?*<br>*- How do speakers feel about how others see them?* | *What spiritual values does the speaker hold?* | they are good at (and not), and that helps to direct them towards an occupation.<br>*How do you describe yourself in the domain of occupation?*<br>*What is the value of education?*<br>*What are future/past jobs?*<br>*What are career aspirations?* |
| | | **Other** | |
| **Note:** Both of the sub-types should be coded as "Personal", a distinction is not required (nor possible). | | Is coded when claims to not fit any of the major domains. | |

| | | |
|---|---|---|
| **Sub-Domains: Personal**<br>The domain of personal should only be coded if no other domain can be coded, or if the claim constructs the speaker across multiple domains in a more generalized sense. Coding should be focusing on how a participant is formulating their claim, not of how the coder interprets the content of the claim. | | |
| **Abilities & Skills** | **Appearance** | **Demographics** |
| The speaker refers to things they can do, and/or things they are good/bad at.<br><br><br><br>**Examples:** | The speaker references any physical traits (e.g., height) or features of their appearance (e.g., clothing style, make up).<br>**Examples:**<br>*I have curly hair, dark skin* | Speaker introduces demographic information (e.g.name, nationality or age) |

| | | |
|---|---|---|
| *I am quite good with technology.* | | |
| **Attitudes & Interests** | **Participant** | **Values & Ideals** |
| The claim includes things the speaker likes or is interested in AND does NOT constitute a claim in another domain.<br>To be coded a claim should include a generalized attitude or interest towards a generalized concept (i.e. children, pets, old people, etc.)<br>The word "like" is not sufficient or necessary for something to be coded as an attitude or interest. This can also include dislikes.<br><br>**Examples:**<br>*I think Psychology is super interesting*<br>*I like kids.* | Participant references being a participant in the study.<br><br>**Example:**<br>I'm not very good at describing myself | The speaker talks about their personal values and principles or ideals.<br><br>**Examples:**<br>*A:::nd in that way I try to make a change, in my direct environment.*<br><br>*It's important to me that everyone is kind to each other.*<br><br>*You only live once, so I don't waste my time being worried.* |
| **Personality, Emotions and Psychological Traits** | **Reflection, Growth & Personhood** | **Habits & Behavioral tendencies** |

| | | |
|---|---|---|
| The speaker references their psychological dimensions, including thoughts, personality traits, emotions, psychological traits, and psychologically-relevant aspects such as mental health.. | The speaker describes themselves in abstract terms. This can include descriptions of developments and growth, generalized comparisons to others, or generalized evaluations of the type of person they are. | The speaker references things they generally do or would do in specific or hypothetical situations that are behavioral and could be physically observed by an external observer, and that do not reference an emotional or psychological trait. |
| Claims in this sub-domain can primarily be observed by the speaker themselves. | | If tendencies cannot be externally observed, code as Personality, Emotions and Psychological traits. |
| **Examples:** | **Examples:** | **Examples:** |
| ''I am a very shy person'' | "And, um, from, from that point, like during the troubles I really I think changed a whole lot of me" | I don't really go to bed on time. |
| ''I have a fear of starting things'' | "It's made me the person that I am" | I never leave the house, honestly. |
| "I like to think about, evaluate, like, my feelings" | 'I tell myself that I need to do things, but it never really works out the way I wanted to.' | I always take the longest route to go somewhere. |
| "I don't like insecure situations; they make me feel real bad sometimes" | 'When I set a goal for myself, usually I try to actually do it.' | I like to check the oven before leaving the house. |
| "I think I also have problems with depression or something" | | |
| "I avoid leaving the house" | | |

**Domain Codes:**

Each claim can be awarded only one code. All codes are written in lower cases. Codes for the domain personal are a combination of the base-code (p) and the code for the specific sub-domain (i.e. Values = v; pv).

| | |
|---|---|
| nc | **N**ot a **C**laim |
| | |
| a | f**A**mily |
| f | **F**riends |
| d | **D**atingv |
| g | **G**ender |
| | |
| r | **R**ecreation |
| t | poli**T**ics |
| e | **E**ducation |
| s | religion/**S**pirituality |
| o | **O**ther |

**P**ersonal

| | |
|---|---|
| ps | Ability & **S**kills |
| pa | **A**ppearance |
| pi | Attitudes & **I**nterest |
| pp | **P**articipant |
| pd | **D**emographics |
| pv | **V**alues & Ideals |
| pt | Personality, Emotions and Psychological **T**raits |
| ph | **H**abits & Behavioral Tendencies |
| pr | **R**eflection, Growth & Personhood |