

**Youth's participation in online support forums on Reddit, and the
influence it has on the communion and agency identity
development processes**

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Abstract

Objective

In this globalized world youth increasingly go online to seek or provide advice for (mental) health related issues. Despite that participation is likely to influence identity of participants, little research has been conducted into the dynamics between youth participating in online support forums and their identity development, which during this age period is most active. This study aims to fill this gap in literature by examining what the dynamics are between youth aged 16 to 23 participating in online support forums on Reddit at the intersection of identity development, in this study divided in agency and communion, and anonymity.

Method

8 Life story narrative interviews and 20 qualitative surveys were conducted with users of Reddit that regularly participate in its support subreddits, in which they were asked to describe their most memorable Reddit experiences. Data by 4 experts knowledgeable either in identity development, online support or anonymity, was retrieved by means of semi-structured interviews.

Findings

Users predominantly stated having communal needs before participating, and experienced feelings of agency as a result of participation. Needs to share, care and belong to a community are predominant communal needs for going online. Behaviour change, perspective change, understanding and acceptance of self were the most dominant agentic results. The majority of users indicated anonymity was an important factor in deciding to turn to Reddit for support, and stated it allowed them to open up and share more easily.

Conclusion

This study found that for youth aged 16 to 23 there are communal and agentic identity processes at play at the intersection with participation in online support forums on Reddit. Anonymity was found to be a prerequisite in users turning to Reddit, and showed dynamics at the intersection with agency and communion. Together with limitations of this study, new approaches for future research were suggested to further broaden knowledge on identity development within online support forums.

Keywords: Identity development, online support forums, youth, anonymity, Reddit

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Introduction

In this globalized and increasingly digitalized world, people spend more and more time online. The millennial generation is the first generation to have grown up using social network sites (Granic et al., 2020). Their usage over the years has evolved to the extent that the majority of this generation reports being online on a daily basis, or at times almost constantly (Atske, 2021; Lenhart, 2015). This reveals the significant role the internet plays in the lives of millennials. Similarly, a significant increase is seen in the usage of online peer-to-peer support forums, also known as online support forums. The rise of online support forums is considered one of the most influencing developments towards accessible sharing of health-related advice and information (Ziebland & Wyke, 2012). Millions of people use online support forums on a daily basis (Reifegerste et al., 2017), and which are said to facilitate people with (mental) health-related conditions to share their experiences, and provide advice and solutions to others dealing with similar conditions (Campbell & Robards, 2013). Considering that most (mental) health disorders tend to develop during youth (Patel et al., 2007), these online support forums are in large amounts visited by young people (Gould et al., 2002; Gray et al., 2005; Kauer et al., 2014). While young people prefer to initially avoid seeking professional help, online support forums have been perceived as easily accessible (as an entry point), more informal (anonymous), trustworthy, allowed for sharing of personal experiences and was less stigmatizing than face-to-face support seeking experiences (Kauer et al., 2014; Gould et al., 2002; Suzuki & Calzo, 2004).

There are many different types of online support forums available on the internet. One highly accessible and widely-used online support forum is Reddit. At first glance, Reddit could be considered an 'ordinary' online community because a lot of the content it supports has an entertainment purpose. However, Reddit is host to a large variety of online support pages, on the site referred to as 'subreddits', where users can find or give support fitting to

their personal needs. The majority of Reddit users are between the ages 18 to 34, and are thus in the age where identity is highly developed (Similarweb, 2022). Because of its widespread usage, and the majority of users being youth, Reddit was chosen as the online support forum most fitting for this study.

Numerous studies have been conducted about the positive and negative effects of online support forums in helping individuals dealing with (mental) health issues (Ali et al., 2015; Flanders et al., 2019; Reading et al., 2019; Tanis, 2008). In their article, Flanders and colleagues (2019) have proposed a model which shows that social support received on these online support forums not only influences mental health, but also 'identity' from which a dynamic seems to occur back to mental health again. In current literature, however, relatively little research has been conducted into the relationship between participating in online support forums and the dynamics with identity development. The studies that have been conducted tend to focus predominantly on marginalised groups going online to share their 'hidden identities', such as the pro-anorexia movement or the LGBTQ-community, and thus not on the average user (Arfini et al., 2020; Cipolleta et al., 2017; Flanders et al., 2019; Gaving et al., 2008; Tanis, 2008). Furthermore, none of these studies focus on youth specifically, which is quite striking considering that the majority of users participating in online support forums are youth. In this age period identity development is most prevalent, as youth start finding out who they are and start working towards creating a sense of identity in order to transition into adulthood (Granic et al., 2020; Morrow, 2004). This highlights the importance of this time period in a person's life and emphasizes the relevance of knowing the dynamics between youth participating online and identity development.

Identity development is broad concept which can be defined in various ways and can be split up into many processes. Two of these identity development processes, which are most prevalent during youth and are active in every individual, are agency and communion.

Agency refers to “advancing status and power relative to others, bolstering dominance and influence over others, and asserting positive distinctiveness from others” (Locke, 2015, p. 1). Thus, in terms of identity development, it is about creating your own identity as opposed to others. Communion refers to the desire of an individual to belong to, be cared for and care for others, cooperate and share with a group or community (Granic et al., 2020; Locke, 2015). In terms of identity development, communion is about assimilating (part of) your identity to the identity of the group or community. In the context of online support forums, agency can occur when an individual joins a new forum to develop their own perspectives or to be able to assert their perspective to others. Communion can occur when an individual joins a specific forum to become part of a community. Because these two identity processes are more prevalent during adolescence and young adulthood, this study focuses on youth aged 16 to 23.

An important topic associated with online support forums is the aspect of anonymity. Users of online support forums use screen names to identify themselves with, which grants a certain sense of anonymity (Gavin et al., 2008; Kaufman & Whitehead, 2018). Reddit is well known for offering users the ability to create anonymous accounts, referred to as ‘throwaway’ accounts. The study of Leavitt (2015) concludes that anonymity is a significant factor in turning to online support forums. In his study, Leavitt investigates the creation of ‘secondary’ (read: anonymous) online support forum accounts so that individuals are able to anonymously disclose information that is not linked to their ‘primary accounts’. Individuals create accounts under fake names, as they expressed concerns that particular individuals would be able to trace back disclosed information to their ‘primary identities’. This shows the link of anonymity with identity and could especially be relevant for individuals that deal with ‘hidden identities’ and life experiences to which a lot of shame is attached, such as ‘coming out’ experiences (Flanders et al., 2020; Gavin et al., 2008). Thus, the question is raised whether

anonymous participation in online support forums has different effects on these ‘primary identities’ than visible participation does.

In order to investigate the dynamics that take place at the intersection of youth aged 16 to 23 participating in online support forum on Reddit and agency, communion and anonymity, this study is supported by the following main research question:

“What are the dynamics of youth aged 16 to 23 participating in online support forums on Reddit at the intersection of agency, communion and anonymity?”

In the theoretical framework that follows identity development, online support and anonymity will be expounded, and it will be explained why a relationship between these concepts can be expected. The method section will discuss how these concepts are assessed reliably and validly, how the data is retrieved and what the interviewed sample looks like. The results sections showcases the findings of the data retrieval. In the discussion the most meaningful findings of this research will be highlighted and grounded in existing theory as showcased in the theoretical framework. Afterwards, implications of these meaningful findings will be made, and the limitations of this research will be given to indicate opportunities for future research.

Theoretical Framework

By expanding on the dynamics of participating within online support forums, agency, communion and anonymity, this chapter aims to clarify the contextual background of this study. To do so, an overview of literature on ‘identity development’, ‘self-help in online support forums’ and ‘anonymity’ is given. A conceptual framework is then shown that captures the dynamics of this study and relates these to the research question.

Identity development

Identity development is a broad term that can be conceptualized into various different processes. Two of these processes are agency and communion, which are vital for developing a sense of personhood as preparation for adulthood (Ely et al., 2008). As explained, *communion* refers to the desire of an individual to belong to, be cared for and care for others, cooperate and share with a group or community (Granic et al., 2020; Locke, 2015). *Agency* refers to “advancing status and power relative to others, bolstering dominance and influence over others, and asserting positive distinctiveness from others” (Locke, 2015, p. 1). During early adolescence communion is most active (Granic et al., 2020). This period is characterized by identification with the values and beliefs of those closest to the child or early adolescent (Steinberg, 1990, as cited by Granic et al., 2020). Thus, social learning occurs (Granic et al., 2020). From the ages of 14 to 18 (middle-adolescence), communion takes place less because resistance to the influence of peers gradually increases (Steinberg & Monahan, 2007). Middle-adolescents start seeing their identity as separate from the influence of peers (Collins & Steinberg, 2006). From middle-adolescence towards late-adolescence, identity formation begins and is developed according to an individuals’ own interests, beliefs and values (Erikson, 1968, as cited by Granic et al., 2020; Kroger et al., 2010). This signifies that agency processes become more prominent, because “individuals need a sense of uniqueness and a sense of belonging” (Adams & Marshall, 1996, p. 430), towards adulthood these processes of communion and agency are balanced-out, supporting each other when necessary (Damon, 1983, as cited by Adams & Marshall, 1996).

Nesi and colleagues (2018) state that experiences online are similar to, or mirror, experiences offline which may imply that communion needs of individuals can just as well be met by participating in online communities as in offline communities. Because of the focus on support within online support forums, this implies that individuals can meet their desire for

sharing, caring and community in online support forums just as much as in an offline support community. As de Choudhury and De (2014) explained, social intimacy, social integration and individual perception of being supported are all predictors of online support effectiveness. Research shows that individuals align their behaviour and identity to that of communities, or highly valued members within these communities (Brechtwald & Prinstein, 2011). Brechtwald and Prinstein (2011, p. 169) add to this that adolescents use peers as “primary sources of social and emotional support while simultaneously using feedback and acceptance from their peers as bases for a sense of self-concept”. This thus seems to suggest that participation in online support forums can reaffirm specific types of identity in accordance with the focus area of that particular support forum (Rodogno, 2012), as well as that social learning occurs within these online support forums (Ely et al., 2008; Granic et al., 2020). Participation reaffirming a specific identity type and using peers for social learning highlights the importance that being part of online support communities and the support provided there can have on the development of identity. In particular, it is likely that online communities may guide the communion identity development process, and contributes to communion needs of sharing, caring, belonging and cooperation. Thus, the following working hypothesis H1 is taken on for this study: *Youth participating in online support forums on Reddit contributes to feelings of communion.*

Research shows that when individuals develop into adolescence, an increase is seen in agentic themes such as an increasing focus on identity exploration and creation (Erikson, 1968, as cited in Granic et al., 2020, p. 200; Kroger et al., 2010). This identity exploration is about exploring the self and making decisions for the self, by “pursuing what one finds personally meaningful” (Granic et al., 2020, p. 201; Morsunbul, 2013). With the large amount of communities available on Reddit, individuals have access to a lot of diverse topics and information when it comes to exploring and asserting their identity (Arfini et al., 2020).

Simultaneously, online communities (of practice) have been found to offer a diverse accumulation of social support and collaborative learning, likely a lot more diverse than what is found in their offline environment (Arfini et al., 2020; Bandura, 2002). This enhanced exploring of identity and accumulation of more diverse support indicate that participating in online support forums allow a user to better explore themselves, and thus participation is likely linked to stronger feelings of agency (Drydyk, 2008; Kurtz, 1990). Thus, the following working hypothesis H2 is taken on for this study: *Youth participating in online support forums on Reddit contributes to feelings of agency.*

Despite the transition from stronger feelings of communion in childhood to stronger feelings of agency in adolescence and early adulthood, these processes do not exist separately (Granic et al., 2020; Steinberg & Monahan, 2007). Instead, the two occur simultaneously, varying in strength depending on the age and the personality of the individual (Damon, 1983, as cited by Adams & Marshall, 1996; Granic et al., 2020). This indicates that the agentic needs of identity assertion and exploration could occasionally contrast with the cooperation and conformity experienced in the communion process. This can be challenging for teens and young adults experiencing both processes simultaneously. which is why it is important to balance the two through a process called *coherence*. (Narrative) coherence is the ability of a user to link their life story to their developing sense self through a reflective and causally connected story (Adler, 2012; Granic et al., 2020). In doing so, the user is driven to “incorporate personal values and beliefs with diverse social roles and relationships, in order to derive one global story of the self.”, which shows that the user is driven to incorporate agency and communion (Granic et al., 2020, p. 201). The balance and conflict between agency and communion will be further explored in this study.

Self-help in online support forums

Self-help is a highly individualistic process, based upon the idea of choice, autonomy and freedom (Rimke, 2010). According to Schueller and Parks (2014), self-help refers to the resources provided to individuals looking to increase their well-being without use of professional assistance. With the adoption of the internet and social media platforms, self-help has increasingly been sought online (de Choudhury & Kiciman, 2017). This happens in online communities through online support groups, online support forums or via social media (Andalabi et al, 2017; Granic et al., 2020; McCormack, 2010; Sharma & De Choudhury, 2018). This thus also indicates that both agency and communion are increasingly affected by participation in these online environments, since more time is spent there now. Through self-help, individuals can develop new identities or accept existing identities (Denzin, 1987, as cited by Kurtz, 1990; Kurtz, 1982; Flanders et al., 2020; Gavin et al., 2008). In case of searching for support, an individual is able to join a community suited to the support they are looking for, and often results in them receiving high quality feedback (de Choudhury & De, 2014). Within Reddit multiple subreddits exist where support is given, with for example communities such as r/mentalhealth, r/relationships and r/lgbt.

Social intimacy, social integration and individual perception of being supported by others are all dynamics that contribute to the effectiveness of support received online (De Choudhury & De, 2014). Albrecht and Adelman (1987, as cited by Braithwaite et al., 1999) define social support as “verbal and nonverbal communication between recipients and providers that reduces uncertainty about the situation, the self, the other, or the relationship, and functions to enhance a perception of personal control in one’s experience” (p. 124). Social support can be categorized into many different supportive categories (Braithwaite et al., 2009; Caplan & Turner, 2007; Cutrona and Suhr, 1992, as cited in de Choudhury & Kiciman, 2017, p. 33). Nonetheless, research mostly agrees on two support types, emotional

and informational support, that both have different effects on social support effectiveness (Braithwaite et al., 2009; Caplan & Turner, 2005; Keating, 2012; Wang et al., 2014).

Emotional support contains the expression of emotions limited to “understanding, encouragement, empathy affection, affirming, validation sympathy, caring and concern, etc.” (Wang et al., 2014, p. 1). Informational support is about providing information and advice (de Choudhury & Kiciman, 2017; Keating, 2012).

Emotional support occurs more often when recipients are experiencing stressful or emotional situations in which they are not in control (Braithwaite et al., 2009). In that case, emotional support can lead to feelings of “comfort and healing” (Braithwaite et al., 2009, p. 142). Braithwaite and colleagues (2009) further explain that emotional support contained relational support (closeness and love), confidentiality, understanding and encouragement (p. 136). These elements provide a sense of community, and make an individual feel cared for and safe.

Informational support includes the following elements: “(a) advice, (b) referrals to experts, (c) situation appraisal, and (d) teaching” (Braithwaite et al., 2009, p. 133). Situational appraisal happens when support givers reassess a described situation by a support asker (Braithwaite et al., 2009). Braithwaite and colleagues (2009) further describe the teaching element as the provision of factual and technical information by support givers. Informational support is most effective when recipients are in control of the experiences that they seek support for, and are thus able to put that information to use (Braithwaite et al., 2009, p. 142). Because agency is about asserting, exploring and developing the self, it is expected that informational support provide the tools for individuals in order to do so, and that it plays a bigger role for the agency identity development process.

Research indicates that receiving positive social support and negative social support might have opposing effects, and is also an indicator of social support effectiveness (Hirsch &

Barton, 2011; Reinhardt, 2010). Revenson and colleagues (1991) have defined negative social support as support that is perceived as not supportive, despite the possibility of the support giver to have well-meant intentions. This is however a very specific type of support, and one that rarely occurs according to their own findings (Revenson et al., 1991, p. 810). Most research addresses negative social support as negative interactions, and thus not as a type of social support (Hirsch & Barton, 2011; Reinhardt, 2010; Strayhorn et al., 2021). These negative interactions occur more often than negative social support, an example being discrimination and racism experienced by participants in LGBT online communities (Flanders et al., 2020; Roberts et al., 2015). Overall, research suggests that positive support is more effective in obtaining positive (mental) results, whereas negative interactions had an inverse effect with positive outcomes (Hirsch & Barton, 2011; Reinhardt, 2010; Revenson et al., 1991; Strayhorn et al., 2021). Because negative support occurs rarely and negative interactions are not a type of social support, this study focuses only on positive support types. Emotional and informational social support are both described as positive types of social support (Langford et al., 2008; Revenson et al., 1991). All in all, the research is supported by the following working hypothesis H3: *Dynamics occur between the type of support and the agency and communion identity development processes.*

Anonymity

An important aspect for individuals joining Reddit is that it allows users to create “throwaway” accounts. Despite that within Reddit both identified and anonymous accounts offer a sense of anonymity to an extent, a study by Andalabi and colleagues (2016) found that throwaway accounts search more for support than identified accounts, and disclose more personal information (Joinson, 2001; Suler, 2004). Suler (2004) states this is because of the disinhibition effect, which is “when people have the opportunity to separate their actions

online from their in-person lifestyle and identity, they feel less vulnerable about self-disclosing and acting out” (p. 322). In order to create an anonymous account on Reddit, users have to add ‘throwaway’ to their account name to let other users know they are only part of that subreddit to receive support on particular topics they are dealing with. After having received the support they came for, these accounts will be ‘thrown away’. Throwaway accounts serve as a barrier of anonymity and provide users a temporary identity distinct from their primary social media identities or offline identities (de Choudhury & De, 2014; Leavitt, 2015). This implies that users do not feel comfortable bringing awareness to their problems in their offline environment, but do feel safe discussing it online where it cannot be traced back to their offline identities. Especially bringing up identity-changing problems (such as ‘coming out’ on r/comingout) on untraceable throwaway accounts might be perceived to have less consequences for primary or offline identities and may thus act only as temporary disclosures instead of having long-lasting effects on the primary and offline identities (Leavitt, 2015). For example, an individual might feel a sense of relief being able to share what they are dealing with, however no progress is made in their offline environment as their throwaway account cannot be traced back to their primary identity. In that case, these temporarily disclosures indicate that users searching for help anonymously are not looking to integrate into that community long-term, but only to satisfy their need for advice or support.

It can be expected that communion needs can just as well be met by throwaway accounts, as these temporary disclosures allow users to receive both emotional and informational support regarding the problems they are dealing with. Thus, it soothes the desire of being cared for, cooperate and share with a group or community. What should be indicated however is that because throwaway accounts on average serve the purpose of placing temporary disclosures (Leavitt, 2015, p. 323), the extent to which throwaway accounts contribute to feelings of communion is likely less than when individuals ask for and provide

support on their primary profiles. This is because the time spent being cared for, cooperating and sharing with others is significantly less on throwaway accounts when compared to an individual repeatedly logging in to a support forum on their primary profiles. This also applies to a sense of belonging, which is recognized as a long-term process that involves an individual being part of a social system for a set period of time to develop a feeling of being indispensable and integral to that system (Anant, 1966, as cited by Hagerty et al., 1992; Hagerty et al., 1992; Harris et al., 2015). For this same reason, the person giving support is likely less invested in the person they are giving support to, for they do not know this person. This is especially the case when a support asker joins a community under a throwaway account tag, as this clearly indicates the user does not have the intention to truly become part of that community on the long-term. Therefore, the expectation is that throwaway accounts moderately contribute to feelings of communion, and thus the following working hypothesis H4 supports this study: *The aspect of anonymity moderately contributes to communion taking place within online support forums.*

As for agency, participating anonymously is not expected to have negative influence on identity exploration and pursuing what one finds personally meaningful, which were named as aspects of agency. Even anonymously users can visit different forums suited to their interests and explore new topics or hobbies. Furthermore, anonymous participation does not limit users in pursuing and representing what they find meaningful. Quite the contrary, users being able to participate anonymously should help them to open up more easily and discuss meaningful but stigmatized problems that normally would be discussed to a lesser extent. That way, they might feel more in control, and are more willing to accept parts of themselves which leads to more identity development, thus influencing agency. An example of this could be a homosexual individual going online to discuss his sexuality and accept that part of himself before coming out to his offline environment, which indicates another agentic process

taking place in that participation results in a user being able to (positively) distinguish themselves from others. Advancing status and power relative to others, and bolstering dominance and influence over others, were also named as part of the agentic process. However, due to the humanitarian nature of support seeking and giving it is unlikely that a lot of dynamics are found between anonymity and users going online to advance their own status or dominance relative to that of others. All in all, the expectation is that throwaway accounts largely contribute to feelings of agency, and thus the following working hypothesis H5 supports this study: *The aspect of anonymity makes it easier for agency to take place within online support forums.*

Conceptual framework

This study is designed to enhance our understanding of the dynamics that take place when youth aged 16 to 23 participate in online support forums on Reddit. Specifically, it explores what dynamics of participation occur for youth at the intersection with agency, communion and anonymity. In doing so, it examines whether dynamics occurs between the type of support and the agency and communion identity processes. At the centre of this investigation is the research question introduced in the introduction:

“What are the dynamics of youth aged 16 to 23 participating in online support forums on Reddit at the intersection of agency, communion and anonymity?”

The answering and examining of this question is guided by five working hypotheses as introduced at the different sections in the theoretical framework:

H1: *Youth participating in online support forums on Reddit contributes to feelings of communion.*

H2: *Youth participating in online support forums on Reddit contributes to feelings of agency.*

H3: *Dynamics occur between the type of support and the agency and communion identity development processes.*

H4: *The aspect of anonymity moderately contributes to communion taking place within online support forums.*

H5: *The aspect of anonymity makes it easier for agency to take place within online support forums.*

An explanation on the methodology used to collect data to explore the research question and working hypotheses is further elaborated in the following section.

Method

For this study, a qualitative research design was chosen to explore the dynamics between youth participating in online support forums at the intersection of identity development. This research design was selected as it is a well-known approach suitable to investigate relationships of which little is yet known and hence, supports the explorative nature of this study (Denscombe, 2012, as cited by Weenink, 2022; Patten & Newhart, 2017, as cited by Weenink, 2022). It is useful and effective in developing knowledge and understanding of complex human or social issues, such as understanding people's experiences when it comes to their own mental health, the meaning they attribute to these experiences and the types of interactions they have with other participants of online support forums (Fossey et al., 2002). In addition, this research took an inductive approach because it allows for answering explorative questions such as 'how?' and 'why?' and allows for analysing structures or

patterns within empirical data in order to uncover and develop new theoretical knowledge (Jebb et al., 2017; Woiceshyn & Daellenbach, 2018).

Sampling procedure

This study deployed two complementary participant samples. The first sample were youth aged 16 to 23 who participate in online support subreddits within Reddit. In order for users to be relevant for this study, they had to have participated in at least five different occasions within subreddits whose main purpose is providing a platform where users can look for and give advice regarding offline world topics. The second sample consisted of experts knowledgeable in constructs as described in the theoretical framework. These included agency and communion, emotional and informational support, anonymity, and how these constructs were affected within online support forums. Since a lot of experts did not have knowledge on all these variables, and because there had been little prior research into the relationship between these constructs, experts that had knowledge on a single construct qualified for this study as well.

To contact participants, purposive sampling was used, which is a method in which the researcher decides what needs to be known to answer the research question, and selects people “who can and are willing to provide the information by virtue of knowledge or experience” (Etikan et al., 2016, p. 2). Because of the explorative nature of this study, the purposive sampling technique provided the possibility to get an as diverse as possible sample consisting of individuals from different genders, different cultures, (expert) backgrounds and subreddits.

For Reddit users, initially, posts were made on several support subreddits in which users were asked to get into contact with the research should they be interested in participating. When this yielded little results, users were contacted directly based on the

number of participations they had in support subreddits, and their age, which resulted in a total of 4 participants. These 4 participants did not yet result in enough data to properly answer the research question. Thus, it was decided to add a second research instrument, a qualitative survey. This qualitative survey was distributed along with the direct messages towards Reddit users, based on the same criteria. In the end this resulted in 8 qualitative interviews with Reddit users and 20 qualitative surveys. Based on their knowledge background, experts were contacted directly based on contact information provided by universities or research companies at which they were employed. This resulted in a total of 4 experts interviews. In total, data was gathered from 32 participants between October 4th and December 12th 2021.

Participants

Of the total qualitative data, 8 qualitative interviews were held with users of reddit support subreddits. Gender ended up divided equally, as 4 of the qualitative interviews were held with men, and 4 with women. Of these users, 5 were from the United States, one from the Philippines, one from Spain, and one from Germany. Three of these respondents were below the age of 20, two being 18 and one being 19 years old. Of the other 5 respondents, one was 20 years old, one was 21, two were 22 years old and the final participant was 23 years old.

By using to the purposive sampling method it was made sure that all these users had at least used Reddit for support at 5 different times, and that they had done so on subreddits whose primary purpose is providing a location where users can ask for and provide support. By doing so, users were contacted based on their posts on different subreddits. These can be seen in the overview of demographic characteristics as displayed in the table below (see Table 1).

Table 1

Demographic characteristics of the user interview sample, participant number congruent with results section

Participant	Age	Gender	Nationality	Contacted via post on
1	23	Female	Spain	r/Relationships
2	19	Female	Filipines	r/Offmychest
3	21	Male	United States	r/Relationship_Advice
4	22	Male	United States	r/Relationships
5	18	Female	United States	r/Offmychest
6	20	Female	German	r/Friendships
7	22	Male	United States	r/Sex
8	18	Male	United States	r/Socialskills

For the quantitative survey users were not asked any demographic information. As with the qualitative surveys, users were contacted based on having at least posted in five subreddits whose primary purpose is providing a location where users can ask for or provide support. Users were only contacted for this research if they indicated they were age 16 to 23 on their Reddit accounts. In case the age was not indicated but a user was still contacted, their age was verified before starting the interviewing process.

All four of the experts had conducted prior knowledge into online communities and the way in which participation influences users. Two of these four had conducted research into online support forums specifically, of which one also did research into deeper understanding of the types of support that occur on these online support forums. Of the four

participants, two experts had conducted prior research into identity development based on participation in online support forums. A clear overview can be seen below in the table below (see Table 2)

Table 2

Demographic characteristics of expert interview sample

Expert	Area of Expertise
E1	Online communities, online support forums, Identity
E2	Online communities, peer-to-peer support
E3	Online communities, Identity
E4	Online communities

Research procedure

A total of 32 responses were collected, of which 4 interviews with experts, 8 interviews with Reddit participants and 20 qualitative surveys with Reddit participants. Data source triangulation took place because experts and Reddit users from different subreddits were interviewed at different points in time. This allowed for verifying the reliability and validity of data retrieved, and provided a better understanding of the relationship between online support forums and identity development (Thurmond, 2001). Within-method triangulation occurs when a researcher uses two different data-collection methods within the same research design (Kimchi et al., 1991, as cited by Thurmond, 2001). Due to Reddit users being observed in the qualitative interviews, and being completely anonymous in answering qualitative surveys, it can be concluded that within-method triangulation took place. This

allowed the researcher to observe whether unique differences in meaningful information were exposed, that normally might have remained hidden if only one of these techniques had been used (Thurmond, 2001). This then increased the reliability and validity of the research results.

The interviews lasted on average 47 minutes. The interviews with both experts and Reddit users were conducted and recorded via the BlueJeans video conferencing software and were conducted in English. During 10 of the 12 interviews both the interviewer and interviewee used their webcam. Two participants stated they felt more comfortable sharing their story without camera, which is why the webcam was left off. At the beginning of the interviews the researcher introduced himself, background and purpose of the study were given and respondents were told what to expect. Furthermore, it was explained how information would be treated confidentially, how it would be anonymized and how at any moment they could withdraw from the interview should they no longer feel comfortable to continue. Finally, it was made clear that the researcher was not a therapist, and could thus not provide any solid advice but merely act as a 'listening ear'. All participants gave verbally recorded informed consent. As sensitive data was discussed during the interviews, and could cause discomfort to respondents, a comfortable and pleasant atmosphere was created before starting off the interview. This was done by taking some time for small talk, and giving respondents space to tell their story without interruptions, before going into the critical events.

The average time to fill in the survey was 12 minutes. The surveys were gathered via Qualtrics experience management software, and conducted in English. The survey started with a page outlining the purpose of the study, what was required of the participants, how the information would be treated confidentially and anonymized, and what the survey would look like. Participants had to give informed consent by clicking 'I understand', before they would be able to continue with the survey. The survey ended by thanking the respondents for taking

the time to fill in the survey, and provided the researcher's contact information in case a participant had further questions or was in need of support in the future.

Research instrument youth

The interview guide for Reddit users was created by using McAdams' (2016) life story narrative as a foundation. The McAdams life story narrative was chosen because it is particularly useful in showcasing how an individual evolves over time (Atkinson, 2001). It allows a participant to describe various events in their life that they consider meaningful. Because of their meaningfulness, these are at the same time events that had an important impact on someone's identity, and thus also their agency and communion processes. This approach avoids asking leading questions, thus increasing the validity of answers. What this also introduces however is a larger reliance on interpretation by the researcher, which are subject to misinterpretations or subject to their own (researcher) bias. Therefore, for this study inter-coder reliability played a significant role.

In McAdams' life story interview, the interviewee is first asked to describe a (25 minute) summarized version of their life story (McAdams, 1995). After having given a life story summary, in step two McAdams asks the interviewee to explain different types of critical events in their life story based on eight narrative prompts (McAdams, 1995). These consists of a (1) peak experience, (2) a nadir experience, (3) a turning point, (4) an earliest memory, (5) an important childhood scene, (6) an important adolescent scene, (7) an important adult scene and (8) another important scene. Thirdly, interviewees are asked after the biggest challenge they have faced in life. Finally, McAdams asks what person(s), group(s) or organization(s) have had the biggest positive and negative effect on the interviewee's life.

When describing their life story, participants are asked to divide their life into chapters, of which a minimum of three to a maximum of seven are required, and give a short

summary of each of those chapters. However, because the goal of this study was to observe an individual's experiences of agency and communion relating to their Reddit lifespan, and not related their entire lifetime, the importance of this life summary for this study decreases. Therefore, interviewees were only asked to give a brief general summary of their life in approximately fifteen minutes for the researcher to get to know the participant, and to help in sensemaking of the data.

As this study pertains to the Reddit lifespan, the range of meaningful experiences an individual can describe is smaller than that of an entire lifetime. Therefore, for this study not all of the narrative prompts are equally important. Adler and colleagues (2017) state that when it is not the goal to capture an individual's entire life story, a researcher can decide not to use various prompts, but is advised to stick to at least the peak experience, the nadir experience and the turning point, as these three have received the most academic attention (p. 9). These three were thus included into the research instrument. Furthermore, it was decided to step away from McAdams life-stage questions, for the Reddit lifespan is much shorter compared to a lifetime of experience for which the life story narrative interview was intended. Instead, it was decided to prompt for two other generally important Reddit experiences. The earliest memory prompt was situationally added to each interview when the interviewer felt this was not discussed enough during step one.

The third and final step in the life story narrative go into the biggest challenge the interviewee has faced in their life, and what person(s), group(s) or organization(s) have had the biggest positive and negative effect on their life (McAdams, 1995). As this research pertains to experiences on online support forums, it is likely that the first or second step already discuss the biggest challenge an individual has faced in their Reddit support forum experiences. Therefore, this step was left as an optional addition to the semi-structured form

of interviewing when the interviewer felt more clarification or detail was necessary. It was therefore used as a probing technique.

At step four, McAdams questions the interviewee about both the biggest positive and biggest negative influence peers have had on them (McAdams, 1995). Because it was decided only to focus on positive interactions and positive support, the interviewee will be asked about which person, group or organization has had the biggest positive contribution to their life. The biggest negative influence was not asked about. As a replacement for a negative support influence, interviewees are instead asked about the role anonymity has played in their Reddit life story. They are asked how important anonymity was, and if they could substantiate this by giving an example of a specific memory. All in all, this resulted in the topic list that can be found in *Appendix A*.

Research instrument qualitative survey

One and a half months into the data gathering process a qualitative survey was designed in order to increase data retrieval. It was important for the survey to strike a balance between open ended questions that could yield a lot of data, and a survey that was relatively little time consuming so that participants would be motivated to answer the survey in its entirety. In total the survey contained eight questions based on the life story narrative by McAdams (2001). The survey was divided up into four parts: (1) General questions about Reddit, (2) critical events as per McAdams life story narrative, (3) biggest life challenge as per McAdams life story narrative, and (4) the importance of anonymity (McAdams, 2001). Part two contained three critical events as described in the McAdams life story narrative, the most wonderful experience the participant had on Reddit, a turning point experience and the earliest memorable experience they could think of. Part three built further on this by asking the biggest life challenge the participant had faced and how Reddit was used for support

during that experience. Part four asked whether it was important that what the participant shared remained anonymous, and if they could give an experience to substantiate that answer.

Research instrument experts

The semi-structured interview guide for experts was created based on the topics discussed in the theoretical framework. These topics were (1) online support forums, (2) identity development, (3) types of support and (4) anonymity. Because there had been little prior research into relationships amongst these topics, each interviewed expert was only knowledgeable on a single topic. Thus, it was decided to create different semi-structured interview guides each inclined more towards one of these topics. What this means is that each interview guide comparatively contained more questions for a specific topic. However, these guides would also still contain questions about the other topics, yet these would be formulated in such a way that experts with a different area of expertise could still answer them based on their assumptions. These questions would for example be formulated differently, avoiding topic-specific terminology, or require more general answers rather than experts having to go into specifics. In total three different interview guides were made. These were with a focus on online support forums, a focus on identity development or a focus on types of support. All of these included questions concerning anonymity and its relationship with the corresponding topic. A general outline of the interview guide, along with argumentation for its relevance, can be found in *Appendix B*.

Data processing and analysis

All 12 recorded interviews were directly transcribed into Microsoft Word documents, after which they were anonymised and imported to ATLAS.ti. Furthermore, the 20 surveys, which were already anonymized, were exported from Qualtrics and imported to ATLAS.ti,

leading to a total of 32 documents. ATLAS.ti was used for sensemaking of the retrieved data, by structuring and analysing the data through an open, axial and selective coding process (Williams & Moser, 2019). The open coding process resulted in a total of 192 different codes for the 32 documents. After finishing the open coding process, the researcher initially started the axial coding process within ATLAS.ti. A second careful reading of the data revealed that the 192 open codes could be grouped into 12 different (axial) code groups. Furthermore, some codes were found to closely resemble others, and some were deemed irrelevant, reducing the total number of open codes down to 137. Finally, for sense-making of the data selective coding took place, which divided the data into 5 (selective) code categories. The full code book can be found in *Appendix C*.

To verify whether the coding process has been conducted reliably and led to an objective codebook, inter-coder reliability was conducted to test whether the same units of data are coded by a second rater (Krippendorff, 2004, as cited by, Syed & Nelson, 2015). The inter-coder reliability process was conducted following a five step process: “(1) selecting an ICR method, (2) developing a coding scheme, (3) selecting and training independent coders, (4) calculating the ICR coefficient (which may lead to continuing the training session and iteratively coding the entire dataset), and (5) reporting the process of evaluating ICR along with the result.” (Nili et al., 2020, p. 5).

For an ICR method, the Krippendorff’s Alpha was chosen as the ICR method because it is the most flexible of the ICR methods, and works with any type of data (Nili et al., 2020). Following the open coding process, a coding scheme was created for better understanding of results of this study. A second independent coder was asked to code three randomly selected interview transcripts and three survey transcripts. This amounted to 19.36% of the total retrieved data, which according to Cheung and Tai (2021) is sufficient when calculating inter-coder reliability. Considering the time limit of this study it was not possible to train the

second rater on domain-specific knowledge. Instead, the second rater was provided with the interview guide or survey for each transcript. Furthermore, the second rater was provided the total list of open codes along with definitions with each of these codes. This was done because the second rater was not directly involved with the research project, and thus required a form of direction to be able to relevantly code the data. The second rater coded the provided transcripts in ATLAS.ti. Afterwards, through ATLAS.ti's 'intercoder agreement' function the coding of the second rater was compared to that of the researcher. This resulted in a Krippendorff's alpha coefficient of .80. Krippendorff (2004) states that a research requires an alpha coefficient of $\alpha \geq .80$, and that tentative conclusions are still valid with $\alpha \geq .67$. Considering that the second rater was not at all involved in the research project, the alpha coefficient of .80 therefore concludes that the coding for this research was conducted reliably

Results

The life stories narrated by interviewees and the knowledge of experts resulted in various findings that make it possible to explore online support forums and their appeal to youth. More specifically, findings contribute to exploring agency and communion, give an insight into the presence of different types of support and reveal the importance of anonymity when it comes to participating in online support forums.

Online support forums

When it comes to defining online support forums, in this case Reddit, both experts and users agree that these online communities are based on 'shared values', on 'shared beliefs', and on a 'common interest'. Whereas experts explicitly state that these three aspects are what forums are based on, users indicate the importance of these indirectly, as indicated by a user:

“The two subreddits that I thought of were r/Asianparentstories and r/Anxietyorhate. Asian parents stories is basically self-explanatory. Whenever I had an altercation with my parents or whenever I had a flashback of my dad abusing me, this was the Reddit that I came to, to vent. What I like about it is that... what stands about this community and what I like is that you don’t have to explain that I have Asian parents, and that it is because of their culture that they treat me as such. I don’t have to explain, I can just tell them what happened and they’ll understand, and I don’t have to explain anything. That’s what makes that particular Reddit special” (User 5)

Experts continue their definition of online support forums by stating that within them, ‘information is matter’. All that users can interact with is the information that is presented, there is no face-to-face interaction. Because of this, there is an ‘absence of non-verbal’, which experts agree on could hinder emotional connection:

“I think there are some things missing in online communities compared to offline interaction. Like... people say that communication is 99% non-verbal, that kind of thing is... especially if you’re on Skype, it is completely absent, so maybe that kind of communication hinders a genuine connection. Because of the lack of communication.” (Expert 3)

“... it is kind of difficult to judge the emotional involvement of people through the text, because that’s what you have in online communities. The fact that you don’t have facial expressions or a tone of voice which are pretty obvious cues about your emotional side when interacting with a person...” (Expert 4).

Because of the lack of non-verbal aspects in online support forums, a process called ‘double mutual anticipation’ does not occur so smoothly according expert E1. She states that in offline environment we anticipate what people are doing, or are going to do, based on non-verbal cues we receive from them. We have certain expectations regarding other people. Because online communities are only based on information, we are not as capable at anticipating what others might do. On top of that, experts state that because users only react to textual information on online support forums, ‘users can decide how to present themselves’, which is basically all that other users interact with. This can sometimes lead to ‘misunderstanding online’, where users are not well understood because of having to make assumptions about someone since the information that a user provides is all anyone can interact with. Although most users only mentioned encountering ‘positivity’ online, some ‘users experienced negativity’, with one user mentioning specifically that better moderation of these subreddits could reduce negativity experienced.

As there is no non-verbal online, users can decide merely to roam Reddit searching for information without interacting with anyone at all. This is a process called ‘lurking’, Despite not being asked about this directly, four of the eight interviewed users specifically name lurking. Four of the eighteen surveyed users indirectly confirm to lurking as well.

Identity development

When experts were asked about identity exploration, they indicated that a lot more identity exploration was possible online due to more ‘online community diversity’ and ‘accessibility’ of subreddits online. When it comes to identity exploration online, users often stated they came ‘looking for entertainment’ and in that way explore their likings, but also that they were able to explore a side of themselves that they could not explore in their offline environment, such as a different gender identity or the possibility of having autism.

The findings revealed that a dynamic between agency, communion and participation in online support forums were indicated twice in the participation process by users, before participating online and after participating online. Before participation online, the user either had agentic or communal identity needs that they wanted to fulfil, which resulted in them going online to self-help spaces to fulfil these needs. In these scenarios, agency and communion were the reason for going online, and these processes were influenced because participation fulfilled these needs. When it comes to agency and communion being influenced after participation, the experiences users had online resulted in a change of either their agentic or communal identity processes. In these cases users interpreted their identity needs fulfilled. During sensemaking of the data, these findings were divided into four categories.

The influence of participation on agency and communion before participation were divided into two categories: 'agentic needs fulfilled online' and 'communal needs fulfilled online'. The influence of participation on agency and communion after participation were also divided into two categories: 'agentic results of participation' and 'communal results of participation'. Because some of the results of participating online influenced identity in a more general term, but could not be placed specifically under agency or communion, a fifth category was created named 'General results of participation'. Table 3 below gives a clear overview of how often these categories were given to specific pieces of text, to give an idea of how strongly agency and communion were influenced before and after participation online. Experts also indicated that there is 'conflict between agency and communion', indicating that the two are not separate, but instead occur simultaneously, are constantly at conflict and yet simultaneously in balance with one another. Table 3 shows that before participating online, communion needs are stronger in determining when a users turns to online self-help spaces than agentic needs do. That being said, agentic needs are still a large reason to go online, confirming that these occur simultaneously. The same can be said for the influence on identity

after participation; agency needs are affected more strongly as a results of participation than communion, yet that does not mean communion is not influenced.

Table 3

The ‘cause’ and ‘effect’ relationship between agency and communion, and participation in online support forums

Selective code	Axial code	Number of open codes	Total number of quotations
Going to online self-help spaces to fulfil identity needs			
	Agentic needs fulfilled online	9	70
	Communion needs fulfilled online	17	161
Only interpreting identity needs fulfilled after going to online self-help spaces			
	Agentic results of participation	17	160
	Communal results of participation	8	81
	General results of participation	2	15

Agentic needs fulfilled online

A relatively small number of agentic needs fulfilled online were named by both users and experts. The most prominent theme that was addressed by both experts and users is users 'sharing expertise' and 'answering question'. The way in which sharing expertise and answering questions occurred was two-fold. Firstly, users either asked for questions and expertise to improve their own life, and in that way fulfilled their agentic needs. Users also regularly indicated being 'interested in others' perspectives' in order to process and improve parts of their lives that they had been dealing with. An example of this is shown in the following comment by a user:

“Or if I have a question for say, bodybuilding, which I’m trying to pursue, then I will direct message a bodybuilder asking him questions or help, which I actually... a few of them I have dm’ed and talked to as well.” (User 3)

In the second scenario, users felt a need to share expertise or to answer questions in order to improve the lives of other people they encountered online. These instances often went together with mentions of 'feelings of empowerment'. As feelings of empowerment are part of agency, improving the lives of other people helped users fulfil their own agentic needs. An example of this is shown in the comment by user 5, where improving someone else's life helped the user and was also a rewarding experience to them.

“It was from me posting about my own solutions that people started to reach out for me, and asked for my help, and helping other people is something that helps me. It was a very rewarding experience of me getting to help someone else.” (User 5)

Other than that, the most recurrent agentic needs are a need for ‘(positive) distinguishment user’, ‘posting achievements’ and ‘showing superiority’.

Agentic results of participation

When it comes to agentic results of participation, the majority of users shared that they ‘acquired knowledge’ by going online, either by asking their own questions or by lurking and reading advice posted in response to questions asked by other users. Users stated they received ‘advice on what to do’ or ‘redirections’, which ‘helped in sense-making of life’ or resulted in ‘behaviour change’ or ‘perspective development’. This is clearly shown in the quote below where a user went online to ask for advice concerning a sexual issue, received advice on what to do, and thereby gained a new perspective and changed his behaviour accordingly.

“Sure... one thing, most of my support has been sexually related, but... one of them was about a girl that I was sleeping with, and we... she was hurting, like right above her vagina, and that was super concerning too, so we stepped to Reddit for medical assistance. (laughs) There were lots of lots... it kind of blew up as I remember, that was super helpful in once again understanding how a vagina works, and how to make things better for the girl so it doesn't happen again, and how we should take breaks and stuff” (User 7)

Users also shared that responses to their posts gave them the ‘motivation’ to face their problems and develop themselves, thus indicating that responses to posts influenced their agentic identity process. One user even stated that responses to their post kept them from giving in to their addictive urges.

“The problem was, I’m not really comfortable with talking to my parents about this kind of stuff. It was hard for me to... you know... it just helped me, if you read the comment, everything they said just kind of hit home. It made me feel like ‘I’m going to do this, I’m doing this.’” (User 8)

Furthermore, users stated that the advice they received helped them get a better ‘understanding of self’, and thus subsequently aided their ‘identity exploration’ and ‘self-acceptance’. A good example of this is shown in the comment made by user 13, who mentions that finding out what kind of personality type he had (in this case an INFP (introverted, intuitive, feeling, perception) personality type according to the ‘16 personalities test’) made him stop questioning his behaviour and instead accept himself as an INFP male.

“I then found the INFP reddit sub and everything made sense from them, why I struggled to fit in with other men, namely my peers in school. As a man who grew up in a household of women, I always felt like the odd one out, but the people on the INFP reddit sub told me that I should embrace being an INFP male, and so I stopped fighting my personality to have a reserved approach towards life, and so I accept that I am an INFP male.” (User 13)

User 17 stated a similar experience, where they had no idea what their personality was like until they explored their identity online, which ultimately led to increased self-acceptance.

“I realized that I don’t know what my real personality was. All I know was that I wanted to appear nice, polite and likeable to people so they won’t see my anxiety. That

realization made me work on my inner self instead of my outer image/reputation. I've started to notice my personality little by little and seen a lot of improvement in myself.” (User 17)

An interesting finding that should be mentioned is that in some instances self-acceptance for users occurred in alignment to the core topic of the subreddit they visited. This was the case for the INFP male, where visiting the INFP subreddit made him ‘realize’ this was his personality. It could very well have been that had the user visited another ‘16 personality type’ subreddit, for example the ISTP (introverted, sensing, thinking, perceiving) subreddit, that this would now have been his accepted personality. Another comment in which this becomes clear is by user 26, where visiting r/Transtryouts resulted in them experimenting with and accepting other pronouns. Had this person been redirected to another forum where trying out different pronouns was not considered sound advice, but rather it was advice to suppress their trans thoughts, the result of self-acceptance and understanding of self might have been very different.

“I learned in the comments of an r/LGBT post how pronouns don’t equal gender, and after redirecting me to r/Transtryouts I feel more comfortable experimenting with various pronouns” (User 26)

Communal needs fulfilled online and communal results of participation

As for communion, in contrast to agentic results, users indicated more often that their communal needs were fulfilled because of participation than that their participation led to communal results on their identity. Results also showed that communal needs fulfilled and communal results of participation are often linked to each other, and seem to be interlinked, which is why the two categories are discussed together. As for communal needs fulfilled

when participating in Reddit, the needs for ‘sharing’ and for ‘caring’ came out most dominantly when users described reasons for going online, and the activities users partake in there. Sharing was predominantly done by users sharing issues they had previously encountered in an offline environment. In these instances, the codes for sharing often occurred together with ‘users are not alone in dealing with their issues’ and ‘filling the void of loneliness’. These are both communal results experienced after participating, and thus show that communion needs before participation often co-occur with results after participation, as opposed to with agentic needs and results, where this does not happen. In contrast, when users shared their own stories as replies to the posts of other users, sharing more often occurred together with ‘caring’. This distinction shows that when communal needs are fulfilled for a user themselves, it often co-occurs with communal results after participation. Instead, when communal needs are met by helping others, there are no communal results after participation. Fifteen of the 28 interviewed users indicated their participation on reddit had a communal result on them in that they had ‘met someone important’. This code was applied when a user stated that this individual had shared an important life lesson with them, or that the user had been in continuous contact with this individual for a certain amount of time. Meeting someone important was predominantly stated as a result of sharing or caring, as seen in the comments made by user 6 and user 2.

“I’ve met a guy there. I don’t know, I asked a question ‘what is people’s opinion about life, what life to them is about’, because I have moments in life where I just sit there and think ‘What’s really life about? Just having a career, and then doing your work, is that all?’. I wondered what other people would think about it, and I think that’s also a very interesting part of Reddit, to see the perspectives of other people. Many people have a very different life than yours, different experiences than you and therefore a different perspective. I was very

interested in that. There was someone, he just answered 'Life for me is about dying, because in the end you actually die'. Then he texted me privately" (User 6)

"One of my most positive experiences on Reddit, I met a person called Deshawn. At first, I contacted him because he said that his emotional health deteriorating. I like helping people, I contacted him, I told him I could be a listening ear, and we became good friends until now. We talked for like 5 to 7 months." (User 2)

Furthermore, sharing was predominantly linked with the communal needs of 'asking for support' and 'asking for opinions', whereas caring was linked with the communal need of 'giving support', and the communal results of 'other users were encouraging' and 'other users were understanding'. Users also indicated the importance of a 'sense of community', which was most often linked with sharing, caring, and most importantly users not feeling alone with their issues. Interestingly, a 'sense of belonging' was not stated by users to be that important. It should be stated users were also not directly asked whether they felt it was important to belong to a community in order not to ask leading questions. It was however confirmed by the interviewed experts to be an important aspect. Finally, users indicated regularly they were looking for 'approval' of other members within these subreddits.

Types of support

In total, emotional support was coded 31 times in the entire coding scheme, whereas informational support was coded a total of 47 times in the entire coding scheme. This shows that informational support is a more prevalent type of support found within online support forums. Two of the interviewed experts stated that 'emotional and informational support are intertwined', and argued that looking at them separately was not possible for one was always

grounded in the other, which is also seen in the code ‘informational support grounded in a sense of emotion’. In terms of results of participation, quotations that were coded with ‘emotional support’ were primarily coded along with ‘meeting someone important’, ‘users are not alone in dealing with their issues’ and ‘advice what to do’. In terms of results of participation, quotations that were coded with ‘informational support’ were primarily coded with ‘advice what to do’, ‘behaviour change’, ‘acquired knowledge’, ‘perspective development’ and ‘redirections’. A full list of co-occurrences can be found in *appendix D*.

Anonymity on Reddit

Of all 32 conducted interviews, including the surveys, 24 users and all four of the interviewed experts stated that ‘anonymity is important to the user’. The most named reasons by users for why anonymity is important to them are ‘anonymity makes it easier to share’ and that it grants ‘anonymity from offline environment’. When asking interviewees about throwaway accounts, eight of the interviewed ‘users did consider making a throwaway account’. Of these, four indicated that their throwaway accounts were created to be able to discuss private matters. Only one user indicated specifically that he saw no reason for creating a throwaway account, stating:

“I don’t really understand the point of it, you’re already anonymous.” (User 7).

Four of the interviewed users stated that anonymity increased the sense of safety that they experienced when posting about their issues. All four of these users also stated that this sense of safety was necessary because they post about topics they are not able to discuss in their offline environment. One user stated that sharing their issues concerning coming out would have potentially been dangerous for them if not posted anonymously, because of living

in a bigoted country (User 18). ‘Anonymity reduces shame’ was another reason named for it being important to the user.

Discussion

The overall aim of this study was to explore what the dynamics are of youth aged 16 to 23 participating in online support forums on Reddit at the intersection of agency, communion and anonymity. Additionally, emotional and informational support types and the benefits and downsides of participating anonymously in online support forums was investigated regarding identity development.

Communion needs before participating in online support forums

The concrete communal needs named most often by users as reasons for going online are a need to be cared for or caring for others, sharing, a need for approval and a sense of community, the latter of which went hand-in-hand with users not wanting to be alone in dealing with their issues, and thus searching for other users that have had similar experiences. These findings confirm the communal aspects named by Granic and colleagues (2020) and Locke (2015). It furthermore shows that Reddit is an online space in which users are able to fulfil their communal needs according to the adopted definition of communion in this study. Only a sense of belonging was not directly found with users, as in no user stated specifically that they were looking for a community ‘to belong to’. The sense of belonging was only confirmed by the interviewed experts to be an important aspect why users turn to online support forums.

Agentic needs before participating in online support forums

The concrete agentic needs named most often by interviewed users as reasons for going online are a need to share expertise, a need to explore their identity and a need for hearing other people's perspective. Sharing expertise was not found as a specific aspect of agency within current literature, and is thus an interesting finding. Sharing is a need of the communion process as found in literature, which is backed by the findings of this research. Yet when it came to the user testimonies specifically for sharing expertise, two indications were repeatedly made. The first indication was that users used the expertise shared by others to improve their own lives, indicating an agentic process. The second indication was that users shared expertise themselves to positively impact and shape the lives of other user's, and that way exercise their need for agency. Both of these indicate feelings of empowerment, which is fitting with results by Drydyk (2008), who stated that feelings of empowerment are considered part of the agentic process. Therefore, sharing expertise was decided an important part of the agency process, which was acknowledged by the interviewed experts within this study.

Another agentic theme described in the theoretical framework that resembles users shaping their own lives is identity exploration. It was described as users exploring themselves, making decisions for themselves and pursuing what they find personally meaningful. Due to the high occurrence of users indicating a form of identity exploration connected to Reddit this research confirms that participation on Reddit highly influences a user's agency. Users reported exploring their identity by pursuing what they find personally meaningful and searching for entertainment. They also stated that Reddit allowed them to explore parts of themselves unlike possible in their offline environment, which gives an indication that youth these days are able to explore more agentic options than before. It also confirms previous

findings that online communities accelerate identity exploration, and thus agency (Arfini et al., 2020; Bandura, 2002).

Communal results of participation in online support forums

The most named results of participation were that users did not feel alone anymore in dealing with their issues and that their participation had filled a void of loneliness.

Furthermore, a substantial part of the interviewed users indicated that they had met someone important online that they could converse with, to whom they could share their issues whilst simultaneously providing care and advice to the other party's problems. This thus confirms that participation in online support forums can result in the social intimacy as described by Choudhury and De (2014), and that peers are used as the primary source of social and emotional support (Brechtwald & Prinstein, 2011). The confirmation of these sources also highlight that previous research on the dynamics of participating in online communities at the intersection with communion are representative of the dynamics of participating in online support forums at the intersection with communion.

Agentic results of participating in online support forums

When it comes to agentic results of participation, there are quite a few that were regularly named in the data retrieval and can therefore be considered significant. Users indicated that their behaviour changed, that their perspectives developed, and that the received advice helped them in self-acceptance and in their understanding of themselves. These agentic results contribute to an individual shaping who they are and in determining how they distinguish themselves from others, thus confirming Locke's (2015) findings that (positive) distinguishment is part of the agency process.

Furthermore, users indicated repeatedly as agentic results of participation that they received advice what to do, that they acquired knowledge and that it led them to be more motivated. Receiving advice what to do or acquiring knowledge about specific topics helped users in dealing with or solving their issues, confirming that it can have a positive effect on the mental health of users (Campbell & Robards, 2013). It helps users shaping their own lives to what they want it to be, which is considered an agentic process (Drydyk, 2008). What these results show is that the agency process is significantly influenced by users participating in Reddit.

The simultaneous conflict and balance between agency and communion

What findings of this study furthermore showed is that dynamics of youth participating in online support forums on Reddit at the intersection of agency and communion occur both before and after participating online. *Before participating online*, users had agentic or communal needs that they were able to fulfil because of going online. *After participating online*, the experiences users had within online support forums resulted in a change of their agentic or communal identity processes. Within this distinction, before participation communal needs are stated as a more prominent decider for why a person turns to online support forums than agentic needs are. This suggest that belonging to a community is a more important reason for going online than distinguishing and exploring the individual. Interestingly however, once users had participated in online support forums, an influence on their agentic process was mentioned more often. This is likely because a lot of the found agentic results in this study can be linked to identity development as an overarching concept, meaning that participation within Reddit led to users developing themselves as a person.

What this study furthermore indicated is that the agency and communion processes occur simultaneously, constantly interchanging between being in conflict with each other and

being in balance with one another. Not only was this confirmed by experts, but the results in table 3 showcase that youth aged 16 to 23 made a similar number of references to agentic and communal processes regarding their participation in online support forums on Reddit. These results thus confirm previous research on agency and communion stating that the two occur simultaneously and not separately, varying in strength depending on the individual (Damon, 1983, as cited by Adams & Marshall, 1996; Granic et al., 2020; Steinberg & Monahan, 2007).

Dynamics between type of support and identity

Not only the general effect of participation was discussed as having an influence on agency and communion, it was also expected that the type of support had a differentiating effect on these identity processes. When it comes to the type of support, with emotional support a slight alignment towards communion is seen, whereas with informational support that alignment occurs towards agency. These findings thus align towards the expectations that were made before the data retrieval based on the research by Braithwaite and colleagues (2009).

Another important note to make is that some of the interviewed experts indicated that emotional and informational support cannot be seen as separate, and more often than not are intertwined. This became evident in the interviews with users where emotional and informational support regularly occurred together with agentic or communal processes respectively. Experts also indicated that informational support is always grounded in a sense of emotional support, as the motivation to write informational advice for someone is often a result of empathy or caring for the user asking for advice. This interesting finding highlights that not all processes in literature can be separated by different definitions, since in reality they are often intertwined or similar.

Anonymity

Another goal of this study was to explore whether the influence of participation on the agency and communion identity processes is different between users that participate anonymously and non-anonymously. Most importantly, the majority of interviewed users and experts stated that anonymity is an important aspect of online support forums. This thus already confirms that anonymity is a prerequisite for a person in deciding whether or not to go online to share their issues. However, only eight of all interviewed users indicated they had made, or had considered making a throwaway account. This is quite an interesting finding in that it shows that users do not consider there to be a lot of difference between main profiles and throwaway accounts. Users indicated that the fact they were attending on a profile with its own (anonymous) name was already anonymous enough. (link aan literature)

Findings in this study suggest that anonymity makes it easier for the user to share. Because sharing is an important aspect of the communion process of an individual, anonymity contributes to the dynamic between identity and youth participating in online support forums by allowing communion to take place more easily. That is because participating anonymously makes it easier for youth to open up and discuss sensitive topics that they cannot discuss in their offline environment. This was confirmed by several interviewed LGBTQ users, who indicated that being able to talk about their issues anonymously, where they would not be judged by their offline environment or feel at risk, led them to self-acceptance. In that sense, anonymity leads to a form of agency, as the individual can freely explore and identify parts of their identity.

Furthermore, a few users indicated that anonymity reduced feelings of shame. Abele and Wojciszke (2007) describe that a difference between agency and communion is that agency is more about the self-interest, and how someone perceive themselves, whereas communion is about the other-interest, and how they are perceived by others. Since shame

occurs because of a person's perception of the opinion of others on themselves, it could be argued this is primarily about the other-interest, and thus influences the communion of an individual. When an individual is able to separate sensitive topics from their actual identity because of an anonymous profile, this would thus indicate that anonymity makes the opinions of others less relevant and thus makes it easier to share, which once again enables communion to take place more effectively. However, because the number of users indicating that anonymity reduced shame was quite small in this study, it is not possible to make such a conclusion with confidence.

Implications

This research confirms the occurrence of dynamics between the agency and communion identity processes of youth during their participation in online support forums, specifically by participating in Reddit. In that sense it confirms that identity needs served in offline spaces are also served in online space. Although this was hypothesized by others for online communities, this study is the first to confirm these dynamics also occur for the online self-help space (De Brechwald & Prinstein, 2011; De Choudhury & De, 2014; Drydyk, 2008; Granic et al., 2020; Kurtz, 1990; Nesi et al., 2018; Steinberg & Monahan, 2007). This research furthermore makes a distinction between agentic and communal needs fulfilled before participation, and agentic and communal results after participation. This particular distinction has not been made yet in existing literature when connected to online support forums, or online communities in general.

This research adds strength to existing literature in that anonymity is an important aspect for users to turn to online support forums (Flanders et al., 2020; Granic et al., 2008; Leavitt, 2015). Especially when it comes to discussing sensitive topics, the increased ease of sharing and reduced perception of shame anonymity provides gives it a clear and lasting

advantage to searching for support on similar topics in an offline environment. When it comes to marginalized groups, the online environment allows these groups to finally discuss issues they are facing in accepting groups, as opposed to a reported stigmatizing response in their offline environment. This study thus also adds strength to literature on the dynamics between anonymity and agency and communion identity development processes. Even though only a few of these effects were found, it still signifies which concrete aspects of agency and communion favour anonymity, and thus also highlights in which way anonymity is not significant for agency and communion.

Limitations and Recommendations

The data retrieval of this study had several limitations that decrease the validity of this research. Because the topic of research in most cases encompasses sensitive topics that users do not feel comfortable speaking about to a complete stranger, and due to a limited data retrieval period, it was difficult to get a large number of interviewees. In the end, this resulted in only 8 qualitative interviews to be held with users. Thus, for future research it is recommended to take a longer data retrieval period and to test these results with a larger sample. Despite having 20 qualitative surveys, the information retrieved from these is not as concrete as that of qualitative interviews, resulting in less data. Users were asked to describe their life story narrative. Because the interviewer did not ask concretely about agency or communion, but instead had to make sense of and draw conclusions from these life story narratives, the results of this study are subject to the interpretation of the researcher (Atkinson, 2007).

Another limitation of the data retrieval is that the form of interviewing resulted in that users had to give self-perceptions of their important, and often sensitive, support experiences within Reddit. It is likely that that users withheld sensitive information or evaluate themselves

more positive or negatively, which decreases the validity of the results (John & Robins, 1994). Thus, an aim of future research should be to explore methods of data retrieval that do not include self-perceptions of users. Brycz (2011) concludes that in her study observers were able to accurately recognize biases in other people, which would thus indicate that for future research a method of data retrieval that includes observations would lead to more reliable results. Thus, an experiment in which users are followed over time and their interactions and behaviours observed in order to draw conclusions could be a route for future research. She also concludes that reducing the perception of a threatened ego could increase validity of self-perceptions, which would indicate that spending more time on creating a non-judgmental atmosphere for the interviewee could improve validity of results (Brycz, 2011). For instance, choosing an interviewer that has had similar experiences to the interviewee could result in the interviewee feeling more at ease giving honest and valid self-perceptions, since he or she is not worried about being judged about them.

The experts interviewed for this research had knowledge on different core topics by themselves, but none had knowledge on how different core topics related to each other or about the extent to which these core topics influenced each other. This meant that experts regularly had to make assumptions when answering interview questions based on the knowledge that they did have, but could not make concrete statements based on conducted research. This also likely decreased the validity of this research.

One limitation of this study was that a handful of interviewees indicated that participating in online support forums led to understanding of self and self-acceptance. In these cases however, this self-acceptance was aligned to the subreddits that these interviewees had visited. An example of this being users going to a gender neutral subreddit, and as a result accepting that they have a neutral gender. Despite users calling this self-acceptance, which would refer to an agentic process, in reality it is a communal process since the user assimilates

to the identity of the group. It is therefore believed that further research into this relationship could lead to some interesting findings, especially when it comes to agency and communion. There has already been some previous research on this topic, however that was focused on online communities in general and not linked to agency and communion (Arfini et al., 2020). Therefore, an idea for future research is to conduct more extensive research on the extent to which identity development of users aligns with the online support forums they visit. For instance, in future research a sample could be divided into two groups that consist of similar characteristics. Both groups visit the same forum dedicated to a specific support topic. However, the control group is only able to read reports made by other users on that specific support topic, whereas the second group, the treatment group, is able to interact with users there. After a specific time period, researchers can test whether the treatment group has assimilated more to the group identity than the control group did. These findings could also be linked to agency and communion and could lead to some contrasting results.

Conclusion

Based on this study it can be concluded there are dynamics between youth aged 16 to 23 participating in online support forums, in this case Reddit specifically, and the agency and communion identity development processes. A dynamic between communion and participation was more frequently found before participation. Needs to share, care and belong to a community are predominant communal reasons for users to turn online, confirming research by Granic and colleagues (2020) and Locke (2015). A dynamic between agency and participation was found more frequently after participation. Behaviour change and perspective development, understanding of self and self-acceptance were named most often as agentic results. Furthermore, the study found that agency and communion occur simultaneously, and interchange between being in balance and being in conflict, which was in

accordance with findings in existing literature (Damon, 1983, as cited by Adams & Marshall, 1996; Granic et al., 2020; Steinberg & Monahan, 2007).

The findings in this research confirm that anonymity is a prerequisite for users to go online. In that sense it is thus an extremely important aspect of online support forums. Users stated that anonymity makes it easier for them to share, in particular when discussing sensitive topics, which is in accordance with findings in existing literature (Joinson, 2001; Suler, 2004). Because anonymity allows for sharing to take place more easily, it enables communion to take place and thus positively influences the communion identity process. Because discussing sensitive topics led to interviewed users self-accepting themselves, anonymity also enables agency. No other indications were found of anonymity influencing identity.

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Appendix

Appendix A: Life story narrative topic list

Thank you for taking the time to participate in this study! The purpose of this study is to investigate to what extent youth's participation in online support forums influences their identity development. This interview is about you, about your life, and your story on Reddit. In order to participate to my study, I ask you to take on the role of a storyteller of your own life – where you piece together the story of your own past, present, and future (mostly related to Reddit). As a social scientist, I will use stories of different Reddit users in order to find significant commonalities and significant differences in the stories that people tell me. When telling the story about your (Reddit) life, you do not have to go into every single experience. Instead, I ask you to be selective. Following this introduction, I will ask you to describe a few key events, in which I ask you to describe important relationships/characters/themes and feelings. As these are meaningful experiences, in some way or form they will describe something about who you were, who you are, and who you will/want to become. The purpose of this interview, based on your life story narrative, is to make sense of how users identity is developed by participation in online support forums. Thus, I am not trying to figure out what is wrong with you, nor am I trying to help you figure out what is/whether something is wrong with you. It is not a therapy session, however I would like to provide you a listening ear.

The interview is divided into a number of sections. It will start more general, and go more into detail in the later sections. The first section is about your life in general, whereas the last two sections are about your Reddit experiences. This first section is important for sensemaking of the later chapter. I will be here to guide you through the interview. At any point you are able to withdraw from the interview, or indicate that you would not like to answer a question. The information of the interview will be used for the study only, as soon as the study is completed, all information will be deleted. In the study itself, all your data will be anonymized and treated confidentially.

1. Your Life Chapter

I would like to ask you to think of your life as a story. Each story has characters, scenes, plots and so forth. Every story has high points and low points, heroes and villains, and so on. A story may even have chapters. If you think about your life story in different chapters, what might those chapters be?

- Please explain a little bit about yourself, where you come from, what you do, your hobbies, you age, and so on. General information.
- Please give a general summary of your life, in which you indicate the main chapters of your life (at least 2 to 4 main chapters).
- Please give each chapter a name and briefly describe the general content of that chapter (characters/relationships/feelings/themes).
- Please also indicate your reasons for joining Reddit and a general overview of your Reddit experiences.

2. Critical events

Now that you've given a general outline of your story, we shift the focus to your Reddit lifespan only. I would like to ask you to focus on specific events that stand out of your Reddit lifespan. These key events should be a specific happening, a significant episode in your Reddit life. An example could be the first time you searched for support, and how that influenced an experience you made in your offline environment. These are particular moments set in a particular time and place, with particular characters, actions, thoughts, and feelings.

I'm going to ask you about **4** specific life events. For each Reddit event, please describe in detail what happened, where you were, who was involved, what you did, and what you were thinking and feeling in the event. Try to explain what impact this event has had on your life story, and what this event says about who you are or were as a person. Please be specific here. The experience all have to be separate events, you cannot replicate an event.

- **Event #1: Peak experience:** A peak experience is a high point in your Reddit life story. It will stand out as one of the best, highest, most wonderful moments in your Reddit lifespan. Please describe in detail a peak experience, or something like it, that you have experienced. Please also describe the impact it has had on your life, who was involved, what it says about you and who you are.
- **Event #2: A turning point:** When looking back on your life, you're often able to identify certain "turning points", episodes in which you underwent a significant change. I am interested in a turning point in your understanding of yourself. Please identify a particular experience that you see as a turning point, the impact it had in your life, who was involved, and what it says about you and who you are.

- **Event #3: Earliest memory:** Please describe in detail the earliest memory you had with Reddit, and describe it in detail. This memory might not seem especially significant in your life today. Please describe what happened, who was involved, what you were thinking and feeling.
 - **Event #4: One other important scene:** Please describe any event in your Reddit lifespan, that stands out in your memory as being especially important or significant. Don't forget to be specific in who were involved, how it influenced you, and what it says about you and who you are.
3. **Life challenge:** Please describe the biggest life challenge you have faced in connection with Reddit. If this has already been discussed at the previous 4 events, you can leave this out. If not, please explain what this challenge was, how you dealt with this challenge, whether others assisted you in this challenge, and how it impacted your life story.
4. **Influences on the Life Story**
- **Most positive influence:** Looking back over Reddit your life story, it is likely that one person, a group of persons or a subreddit stands out as having the biggest influence on your (Reddit) life story. Please identify the person, group of persons or subreddit that has had the greatest positive influence on your life story. Please describe this person, group, or organization and the way in which he, she, it, or they have had a positive impact on your story. Why did they have this impact?
 - **Influence of anonymity:** Looking back over your life story, please explain how influential the aspect of anonymity has been in your participation on Reddit. Was it important to you that what you shared remained anonymous/untraceable to you? If so/not, could you explain why? Could you substantiate this with specific experiences/memories?

Appendix B: Expert interview guide

1. Explanation of the study + Informed consent

Thank you for taking the time to participate in this study. The purpose of this study is to investigate to what extent youth's participation in online support forums influences their identity development. Identity development has been divided into two processes, agency and communion, which will be explained further into the study. The support that is given/received within online support forums is another aspect that will be investigated, in order to determine to what extent these influence the two identity development processes. Finally, the aim is to study to what extent the effect of participation and different types of support are influenced by anonymous participation. In the end, the goal of this paper is to add to academic knowledge concerning online support forums and identity development, and to potentially show ways in which online support forums can be more effectively designed.

My name is Justin Schoot. I am in the final half year of my Master Communication Science at the University of Twente in the Netherlands. This research is my graduation thesis. Before this I studied Hotel Management. I've always been interested in social media and online (support) forums, and the effect they can have on youth. Especially considering according to evolution it takes a long time for a species to develop in favour of external influences and that it is such a recent but highly influential development.

I would like to ask you whether the interview can be recorded? After the interview is done, I will transcribe the recording. As soon as that's finished, the recording will be deleted. As soon as my study is finished, so will the transcription. The information will be anonymized and used confidentially. I expect the interview to take up to an hour. Do you have any questions for me, before we start?

2. Demographics and Background information of expert

- Could you start by telling me a little bit about yourself?
 - Some background incl..
 - Field of expertise / educational background, interest in the field (how s/he got to this profession/knowledge..)

3. Online communities – Online support forums - Reddit

- Can you tell me about how you see/understand online communities?
 - What does it look like (features)?
 - What does it set out to do (objective)?
- Do you think there are differences between on and offline communities? If so, why? How?
- In your opinion, what are primary reasons for people to join and participate in online (support) communities (as opposed to offline)?
- How important do you think is (the role of) anonymity within online (support) communities?
 - Why would users join online (support) communities anonymously?
- Do you think online (support) communities are particularly interesting to youth? If so, why?
 - Is there any evidence of this?

4. Identity development - Agency & Communion

Agency: “Is about the desire to (positively) distinguish yourself from other people, by developing and exploring your own identity and uniqueness. It is also about pursuing something that is meaningful to you. This can go as far as advancing your own status or power relative to others, or by asserting influence or dominance over others.”

- Because of more diversity online, more options to explore one’s identity
- Can generate sense of empowerment by helping yourself and others

Communion: “Is about the desire to belong to, cooperate and share with a group or community. Within that community, it is about being cared for, but equally about caring for others.”

- Individuals might adjust their behaviour to that of a community
- Use peers as primary sources of feedback and acceptance, and as a base for a sense of self-concept
- Social learning occurs

General

- In general, how do you see/think about the role of (online) communities in people's lives?
- Do you think online (support) communities influence how users behave? If so, how/why?
- Do you think online (support) communities influence how users see themselves? If so, how/why?
- Do you think online (support) communities influence user's identities? If so why/how?
 - Is there any evidence supporting your claim?
- In your opinion, do individuals align their behaviour to online (support) communities that they belong to or want to belong to?
 - If so, is there an age at which this happens most?
- Do you think participation in online (support) communities influences agentic needs? If so, why/how?
 - Is there any evidence supporting your claim?
- Do you think participation in online (support) communities influences communal needs?
 - Is there any evidence supporting your claim?
- Do you believe that participation in online communities can influence an adolescents transition into adulthood? If so, how/why?
 - Is there any evidence to support your claim?
- Do you feel there a difference between how users behave online and offline?
 - Do you think that users' identity/behaviour online influences their offline behaviour/identity? If so, why/how?
- Do you believe that the effects for users that join a community anonymously are different? If so, why?
 - Is there any evidence supporting your claim?

Agency (delving deeper)

- Do you think that online (support) communities provide users the opportunity to advance their own status or power relative to that of others? If so, how/why?
- Do you think that online (support) communities allow users to positively distinguish themselves from others? If so, how/why?

- Do you feel that online (support) communities allow users to explore their identity? If so, how/why?
 - Is there any evidence that supports your claim?
- Do you believe that the process of agency is influenced differently in offline environment than in an online environment? If so, why/how?
 - Is there any evidence to support your claim?

Communion (delving deeper)

- Do you think that online (support) communities offer users a sense of community? If so, how/why?
- Do you think that online (support) communities offer users a sense of belongingness? If so, how/why?
- Do you think that online (support) communities can fill the need of users to be cared for and care for others? If so, how/why?
- Do you believe that the process of communion is influenced differently in offline environment than in an online environment? If so, why/how?
 - Is there any evidence to support your claim?

5. Types of social support

- What types of support do you think/see are most prominently given on online support forums?
 - Why do you think that is?
- In what way do you think each of these different types of online support influences users?
 - Do you believe these will these influence how users behave?
 - Do you believe these will these influence user's identity?
 - Is there any evidence to support your claims?
- Do you believe that there is a difference in the influence of support given for people who have joined anonymously and those who have not? If so, why/how?
 - Is there any evidence to support your claim?

(When deemed necessary) Informational and Emotional specifically:

- Name the two types of social support

- **Informational:** “showing support that provides information containing advice, referrals to experts, situational appraisal and teaching. This type of support is often given when a support giver reassesses a described situation by someone asking for support. Often factual/technical information. Most effective when users are in control of the experiences they seek support for, and can use the information to do something about it”
- **Emotional:** “showing support that contains the expression of emotions such as understanding, encouragement, empathy affection, affirming, validation sympathy, caring and concern, etc. It occurs most when support askers are experiencing stressful or emotional situations in which they are not in control. It can lead to feelings of comfort and healing. Is also about closeness, confidentiality, understanding and encouragement.”
- In what way do you believe informational support influences users? Why?
 - Is there any evidence that supports your claim?
- In what way do you believe emotional support influences users? Why?
 - Is there any evidence that supports your claim?
- Do you believe informational support influences user’s identity? If so, why/how?
 - Is there any evidence that supports your claim?
- Do you believe emotional support influences user’s identity? If so, why/how?
 - Is there any evidence that supports your claim?
- Do you believe that these effects are different for people who have joined anonymously? Why (not)?
 - Is there any evidence to support your claim?

Appendix C: Code book

Selective codes	Axial codes	Open codes	Definition
Aspects of Identity Development	<i>Aspects of Agency</i>	(Positive) Distinguishment expert	Expert stating that positive distinguishment is one of the reasons that users participate in online support forums.
		Agency happens in adolescence	Experts state that agency typically occurs in adolescence.
		Competition online escalates agency	Worldwide access to the internet and online support forums can lead to more extreme showing of agency in order to be able to distinguish yourself from other users.
	<i>Aspects of Communion</i>	Social learning	Occurs when individuals learn and develop by assimilating beliefs and values from people they socially interact with.
		Social learning childhood	Social predominantly occurs in childhood.
		Similar experience	By participating in online support forums, users find other people that have gone through similar events or have experiences the same issues.
		<i>General aspects of Identity Development</i>	Identity online is an extension of identity offline
	Conflict agency and communion		Experts state that agency and communion are constantly in conflict with each other.
	Identity framing youth		Identity framing of individuals occurs during youth and early adolescence.

	○ Openness identity transition indicator	The open-mindedness of an individual can be considered an indicator for how quickly he or she transitions through Loevinger's ego stages.
	○ Identity develops according to forums visited	The identity of an individuals develops in accordance with the forums he or she most visits.
	○ Identity develops contrary to forums visited	The identity of an individual is able to develop contrary to the forums he or she visits.
	○ Effects agency and communion vary per topic	The extent to which agency and communion are affected by participation depend on the topic of the online support forum users participate in.
	○ Loevinger's ego development	Experts state that agency and communion are linked to the stages named in Loevinger's ego development, not to age in particular.
○ Aspects of Online Support Forums		
	<i>○ Technical aspects of online support forums</i>	
	○ Affordances	Online support forums consist of affordances, which are the specific function of an aspect within an online support forum.
	○ Asynchronous support	Support that doesn't occur at the same time, asynchronous support, is an aspect of online support forums.
	○ Forums designed for specific target groups	Online support forums can be designed to appeal to specific target groups.
	○ Profile history	Within Online Support Forums users have the option to review back their profile history, and thus see in what sense they have changed, or remained the same.
	○ Users are bound through technicalities	Users online are bound to each other because of a technicality.
	○ Online is self-projected	A large part of interaction online is self-projected, in the sense that users self-project

		the meaning of information they receive online.
	○ Lurking	Users participate in online support forums, but don't have any actual interaction with participants on that forum. They use these forums to read and gather advice from other people's interactions. They make use of the unique feature of invisibility online, and are thus 'lurking'.
	○ Anonymity is important to the user	A reasons for Reddit users to go online for support is because there they remain anonymous.
	○ Anonymity not important to a user	Users stated that anonymity was not important to them, and thus not a reason for joining an OSF.
	<i>○ General aspects of OSF</i>	
	○ Users can join forums based on topics that they like	Online support forums give users the option to join specific forums that they are interested in.
	○ Shared beliefs	Online support forums are based on shared beliefs.
	○ Shared values	Online support forums are based on shared values.
	○ Users are bound through commitment	An aspect of online support forums is that users are bound to each other by the similar commitment they have to that particular forum.
	○ Accountability	Users holding each other accountable is an important element within online support forums.
	○ Common purpose	Online support forums are based on a common purpose which users of that subreddit adhere to.
	○ Common interest	Users join online support forums which are based around similar interests to their own.
	○ Continuously built	Online support forums are continuously built, and thus evolving, by users that participate in them.

○ Peer-to-moderator support	A type of support within online support forums is support that occurs from peer towards moderator and vice versa.
○ Peer-to-peer support	A type of support within online support forums is support that occurs from peer towards peer and vice versa.
○ Online community diversity	Online communities are much more diverse compared to offline communities.
○ No silent participation online	A participant of a conversation online is not able to silently participate, in the sense that other participants of that conversation can see them being silent.
○ Bad Faith	When an individual denies 'other' identities than the identity they are currently taking on.
○ No non-verbal online	There is no non-verbal communication within online support forums.
○ Information is matter	Within online support forum environments, information is matter.
○ Informational mutual anticipation	Mutual anticipation that occurs in online environments is merely based on information that is shared.
○ Less tangibility of consequences	Consequences of actions online are not as tangible and easily recognized as consequences of actions in offline environment.
○ Users can present of themselves whatever they like	Online users can share whichever information of themselves that they like, and thus create an altered persona.
○ Awareness	Online support forums more easily create awareness for specific topics than what would be possible in an offline environment.
○ Users sharing their perspectives	Users sharing their perspective on a particular event or issue in order to help, inform or support other users.
○ <i>Anonymity</i>	

○ User did consider making a throwaway account	Users state that they considered or made a throwaway account on reddit.
○ Anonymity makes it easier to share	Anonymity makes it easier for users to share.
○ Anonymity reduces physical appearance bias	Being able to post anonymously reduces physical appearance bias another user can have towards the poster.
○ User never considered making a throwaway account	Users stated not ever having considered making a throwaway account.
○ Anonymity increases openness	Anonymity allows users to more easily open up.
○ Anonymity reduces shame	Anonymity reduces the shame Reddit users feel when posting on online support forums.
○ Anonymity increases sense of safety	Anonymity provides users (a sense of) safety that cannot be found in their offline environment.
○ Anonymity from offline environment	Anonymity online allows users to share on online support forums without people in their offline environments finding out about it.
○ Anonymity reduces weight of personal attack	When users receive a personal attack on online support forums, the weight of that personal attack feels less comparatively to a similar remark in offline environment, because of anonymity.
○ Throwaway account in order to discuss private matters	Users stating that the reason they created a throwaway account was to be able to discuss private matters that they didn't want anyone else finding out.
○ No influence anonymous participation	The influence anonymity has on the effects of participating in online support forums are the same as when an individual would not participate anonymously.

○ *Negativity*

	○ Misunderstandings online	Participants state that they encountered misunderstanding or miscommunications online.
	○ Moderators should manage negativity	It is stated that it is important that moderators manage any negativity that occurs within their online support forums.
	○ Few negative experiences	Experts state that in their research of online support forums they rarely encountered negative experiences.
	○ Support didn't help	Users stating that the support they received online did not have any effect.
	○ User experienced negativity	Users state having experienced negativity online.
	○ Negative experience influenced wellbeing	Users state that the negativity they experienced online influenced their (offline) wellbeing.
	○ No negative experiences for user	Users state not having experienced any negativity online.
○ Going to online self-help spaces to fulfil identity needs		
	○ <i>Agentic needs fulfilled online</i>	
	○ Sharing expertise	Reddit users sharing their expertise with certain events in order to help others looking for advice.
	○ Showing superiority	Agency is about showing superiority towards other people.
	○ Bolstering dominance	Online support forums provide users a platform in which they can bolster dominance over other users.
	○ Users share their own experiences	Users within online support forums sharing their own experiences in order to help others looking for advice and support.
	○ (Positive) Distinguishment user	Users stating that they were able to (positively) distinguish themselves online from other people.

	○ Posting achievements	Users posting of achievements they made in their offline environment.
○ <i>Communion needs fulfilled online</i>	○ Trust	Trust being a necessary aspects in order for support to work within online support forums.
	○ Sense of belonging	Users are looking for a sense of belonging when participating in online support forums.
	○ Users are not alone in dealing with their issues	By participating in online support forums, users are no longer alone in dealing with their issue, but instead can share them with users of that forum, who have experiences the same.
	○ Vulnerability	Vulnerability is an important element within online support forums.
	○ Other users were understanding	Participants state that other users within the online support forum were understanding towards them.
	○ Sharing	An activity that occurs within online support forums is users sharing part of their lives with other users, and vice versa.
	○ Caring	The possibility to care for other users, and to be cared for, is an important aspect of online support forums.
	○ Asking for support	Users stating that they went online to ask for support on events in their offline environment.
	○ Asking for opinions	Users stating that they went online to ask for opinions of other Reddit users of events in their offline environment.
	○ Sense of community	Users experiencing a sense of community within online support forums.
	○ Giving support	Reddit users participate in online support forums in order to be able to provide support to others.
	○ Sense of comfort	Users stating how they experienced a sense of comfort as a result of support,

or how they were able to give others a sense of comfort.

	<ul style="list-style-type: none"> ○ Interested in others' perspectives 	<p>Users state they were interested in other people's perspectives on issues they encountered in offline environment.</p>
	<ul style="list-style-type: none"> ○ Providing advice 	<p>Users state that they gave advice to other participants.</p>
	<ul style="list-style-type: none"> ○ Positivity 	<p>Users encountering positivity online.</p>
	<ul style="list-style-type: none"> ○ Other users were encouraging 	<p>Participants state that other users within the online support forum were encouraging towards them.</p>
	<ul style="list-style-type: none"> ○ Answering questions 	<p>Reddit users state answering questions of other on online support forums.</p>
	<ul style="list-style-type: none"> ○ Unconditional support 	<p>Users stating that the support they received within online support forums was unconditional, the other users didn't need expect anything in return.</p>
	<ul style="list-style-type: none"> ○ Users decide to contact personally 	<p>Users state that as a response to a post, another user decided to contact them personally, or vice versa they decided to contact a user personally based on a post they read.</p>
<ul style="list-style-type: none"> ○ Reasons why youth participate in online support forums 		
	<ul style="list-style-type: none"> ○ Looking for support 	<p>Users participate in online support forums because they are looking for support on events in their offline environment.</p>
	<ul style="list-style-type: none"> ○ Looking for entertainment 	<p>Users participate in online support forums because they are looking for entertainment.</p>
	<ul style="list-style-type: none"> ○ Looking for friends 	<p>Users participate in online support forums because they are looking for friends.</p>

○ Looking for advice	Users participate in online support forums because they are looking for advice on events in their offline environment.
○ Emotional outlet	Users use online support forums as an emotional outlet for their offline environment experiences.
○ Joining out of curiosity	Users stating they joined out of curiosity to find out what Reddit was like.
○ Not a lot of people to talk to in real life	Users state going online because they didn't have anyone in their offline environment that they could talk to.
○ Participation to control (addictive) urges	Users state that participating in online support forums helped them when they had urges to relapse on their addiction.
○ Accessibility	Accessibility is a reason why online support forums are so popular.
○ OSF's are intuitive to youth	Youth participate in online support forums because they are intuitive to them.
○ Easy to connect with others	Online support forums made it easier for users to find connection with other people.
○ World exploration	Reddit users are able to explore the world via participation in online support forums. ^{[P] [SEP]}
○ Interaction	Participants of online support forums had some kind of interactions with (an)other participant(s) online.
○ Not wanting to burden people in their real life	Participants go to online support forums with their issues because they don't want to burden people with

them in their offline environment.

○	Interpretation of identity needs fulfilled after going to online self-help spaces	
	○ <i>General results of participation</i>	
	○ Perspective development	Users state that participating in online support forums helped them develop their perspective on the world and events in their offline environment.
	○ Openness	Participation in online support forums has made individuals more open in their offline environment.
	○ Value development	Users are able to develop their values as a result of participating in online support forums. [P] [SEP]
	○ Behaviour change	Reddit user experiences behaviour change as a result of participating in online support forums.
	○ Increased self-esteem	Approval that users receive based on their posts on online support forums leads to improved self-esteem.
	○ Positively influences mental health	Participation within online support forums has a positive influence on the mental health of users.
	○ Motivation	Users state that their participation in online support forums led them to be more motivated in their offline environment.
	○ Identity development is accelerated	Identity development of individuals is accelerated by participating in online support forums.
	○ <i>Agentic results of participation</i>	
	○ Identity exploration	Users are able to explore their identity by participating in online support forums.

○ Finding your uniqueness	Participation in online support forums helps users explore what makes them unique, what fits with their personality.
○ Feelings of joy	Reddit user experiences feelings of joy as a result of posting on online support forums.
○ Feelings of confidence	Reddit user experiences feelings of confidence as a result of posting on online support forums.
○ Acquired knowledge	Reddit users have acquired knowledge by participating in online support forums.
○ Other users provide advice	Users state that they were given advice by another participant within the same online support forum.
○ Advice helps in sense-making of life	Advice Reddit users receive in online support forums helps them make sense of events in their offline environment.
○ Understanding of self	Users stating that the support and advice they received online helped in understanding of themselves.
○ Feelings of achievement	Reddit user experiences feelings of achievement as a result of posting on online support forums.
○ Redirections	Users receive helpful redirections on posts they made.
○ Advice what to do	Advice Reddit users receive in online support forums helps them in deciding what to do with events in their offline environment.
○ <i>Communal results of participation</i>	
○ Users feel they matter	Users feel heard as a result of interacting within online support forums.
○ Meeting someone important	Participants of online support forums stated that they met someone online that became meaningful to them.
○ Approval	Users were approved of based on posts they made on online support forums.

○ Self-acceptance	Users state that participation in online support forums helped them accept themselves.
○ Gave peace of mind	Users stating that sharing their issues online helped with their own peace of mind.
○ Support gave hope	Users stating that the support they received online gave them hope.
○ Filling the void of loneliness	Interacting with other users within online support forums made users feel less lonely.
○ Profile history sense of belonging	Experts state that having a profile history increases the sense of belonging, whereas a lack of profile history reduces sense of belonging with a community.
○ Types of support	
○ Emotional and informational support are intertwined	Emotional and informational support cannot be considered separate, as they are often intertwined when it comes to online support forums.
○ Informational support grounded in a sense of emotion	It is stated that informational support cannot be defined as strictly only informational, it is often grounded in a sense of emotion.
○ Informational support	Users share and receive informational support in their interactions on online support forums.
○ Emotional support	Emotional support is shared or received within online support forums.
○ Emotional support influences communion	Emotional support users received influenced the communal process.
○ Informational support influences agency	Informational support users received influenced their agentic process.
○ Emotional support influences agency	Emotional support users received influenced their agentic process.
○ Informational support influences communion	Informational support users received influenced their communal process.
○ No non-verbal online not that relevant for informational exchange	Experts state that besides the fact that there is no non-verbal communication online, that this doesn't particularly matter

when it comes to informational exchange.

Appendix D: Co-occurrences emotional and informational support

Co-occurrence of emotional and informational support with results of participation

Code	Emotional support	Informational support
Acquired knowledge	2	8
Advice helps in sense-making of life	1	7
Advice what to do	4	20
Behaviour change	0	10
Feelings of achievement	0	0
Feelings of confidence	0	0
Feelings of joy	0	0
Finding your uniqueness	0	0
Identity exploration	0	0
Increased self-esteem	0	0
Motivation	3	1
Other users provide advice	3	7
Perspective development	2	7
Redirections	0	9
Self-acceptance	2	4

Understanding of self	0	3
Value development	0	0
Filling the void of loneliness	1	1
Gave peace of mind	0	0
Meeting someone important	6	6
Profile history sense of belonging	0	0
Support gave hope	0	1
Users are not alone in dealing with their issues	5	3
Users feel they matter	0	0
Identity development is accelerated	0	0
Openness	0	0
Positively influences mental health	1	4