Commerce and crossover of resources in Facebook Groups – A qualitative study

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ABSTRACT

This paper presents a study on communal coping processes on *Facebook*. In interviews (N = 68), participants describe their *Facebook* behavioral patterns they engaged in when coping once offline and a second time during an online tour through their personal Facebook page. This exploratory study concluded that users prefer to turn to specific *Facebook* groups in order to cope with a particular stressor. These groups can be small, including only people from their individual network, or larger, comprising several members, which may include unknown contacts. Focusing on communal coping processes in *Facebook* groups, results of content analyses show four types of communal coping: (1) individual coping (through social support), (2) delegated coping, (3) commerce of resources and (4) crossover of resources. The results indicate how communal coping occurs on *Facebook*.

1. Introduction

In July 2018, 2.34 billion people world-wide used *Facebook* on a regular basis and 1.47 billion users participated in daily activities on *Facebook* (Facebook, Q2/2018). In summer 2017, Facebook announced that in Germany 32 Million people were registered on *Facebook*. According to these numbers about 38% of the German population actively engage in this particular virtual environment. The Online Social Network (OSN) *Facebook* has become an integral part of the lives of many people influencing their engagement in culture and politics and their interaction with family and friends. Researchers world-wide recognize the urgency to explore *Facebook's* influence on people's social life and the consequences for their subjective well-being (Wilson, Gosling, & Graham, 2012). Also stress research needs to adapt to these societal changes and take into account Online Networks in order to determine how *Facebook* impacts people's coping and perception of stress.

Basically, *Facebook* offers its users the opportunity to maintain social connections in a virtual social environment. Research has demonstrated that social resources and prosocial behavior are essential parts of coping process (Buchwald, Schwarzer, & Hobfoll, 2004; Hobfoll, 1989; Lazarus & Folkman, 1984). Therefore, research is needed to examine how *Facebook* members integrate the virtual social dimension into their coping processes. The importance of this research field derives from the potential effects that interactions on *Facebook* may have

on the individual. It is necessary to investigate and identify coping dynamics as well as resource loss and gain (Hobfoll, 1998) that may occur in the virtual environment.

In Germany, there are few studies that have investigated *Facebook's* impact on coping processes. In general, research so far shows that *Facebook* members used their virtual network for coping or denied doing so at all (Schümer & Buchwald, 2012). Early exploratory studies in Germany (Braasch, 2018; Braasch & Buchwald, 2015) showed clearer patterns of *Facebook* use in times of stress and when students were trying to cope with specific stressors for example, when dealing with exams and/or presentations. In these studies, interview analyses show the significance of coping strategies with school-related stressors (Braasch & Buchwald, 2017). International research shows *Facebook's* impact on coping in several ways. *Negative effects* occur due to inappropriate or annoying content, being tethered or a lack of privacy and control. Further negative effects are social comparison, jealousy, relationship tension, conflict and break-up distress (Fox & Moreland, 2015; Krasnova, Wenninger, Widjaja, & Buxmann, 2013; Lukacs, 2012). *Positive effects* were found with respect to social support and coping (Nabi, Prestin, & So, 2013; Robinson, 2011; Tsai-Yuan, Chen-Ying, & Ming-Chun, 2014; Zanno, 2013). Empirical findings suggest that *Facebook* may serve either as a facilitator of coping processes on the one hand or as originating new stressors on the other. It is important to further investigate the dynamics of interactions in *Facebook* as it may lead to functional or dysfunctional coping.

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The study presented here uses a qualitative exploratory research design to investigate the dynamics of communal coping processes on Facebook defined as the pooling of resources and efforts of several individuals such as groups, families, or communities for the purpose of confronting adversities (Lyons, Mickelson, Sullivan, & Coyne, 1998). For Lyons et al. (1998), the origin of this process occurs when people appraise a stressor as either a shared problem (social appraisal) or as an individual problem (individual appraisal). Communal coping involves coping with a common stressor in a social group (or dyad). Thus, each individual in the group copes with the same stressor. Accordingly, the communal coping process does not have the same outcome for each individual involved in the process.

We assume that *Facebook* offers a virtual environment where people, confronting an individualistic or communal stressor, come together in groups to cope with their common stressor. Communal coping is often employed in long term relationships, but also when people find each other dealing with similar stressful situations (Mickelson, Lyons, Sullivan, & Coyne, 2001). Lyons et al. (1998) define three aspects central to the communal coping process: (1) communal coping orientation, (2) communication about the stressor and (3) cooperative action. Therefore, an individual confronted with a particular stressor might see *Facebook* as a perfect platform to set up a group where the stressor could best be coped with communally. Within this platform the group members can communicate about their stressor, they might share their knowledge and experience with the stressor, clarify the requirements and the like. Eventually, the group members can develop strategies on how to cooperate in order to deal with a stressful event. Therefore, according to the theory of communal coping resources are exchanged within dyads or groups for the benefit of each individual participating in the coping process.

Our research to date has shown that Facebook users can access a variety of resources through Online Social Networks (Braasch, 2018; Braasch & Buchwald, 2015). The first pilot studies showed encouraging results with regard to stress and coping processes within Facebook. This might be due to our resource-oriented approach within the conservation of resources-theory (short COR theory; Hobfoll, 1998) and differs from other research on stress and coping on Facebook in the field. Within the theoretical framework of COR theory Chen, Westman, and Hobfoll (2015) describe resource exchanges in their resource crossover approach, which enables in-depth, detailed insights into communal coping processes. Therefore, COR theory and the associated resource crossover approach offer an appropriate theoretical springboard for our qualitative content analyses (Mayring, 2010). On the basis of these theoretical models, a category system was created using deduction. Additionally, structures of communal coping processes in Facebook were inductively identified and integrated into the deductive system of categories. Combining inductive categories with the theoretical categories enables a particularly complete, clear picture of the communal coping processes in Facebook.

In addition, our research design, unique in the field, was developed especially for this exploratory research on coping within Facebook. The three parts of the interview situation confront the 'third person effect' (Davison, 1983; Fox & Moreland, 2015), which often leads to limitations regarding the depths and quality of interview data in this research field (e.g. Schümer & Buchwald, 2012). The third-person-effect hypothesis predicts that people tend to perceive a greater effect of mass media on others than on themselves. To summarize, the present research differs from other stress and coping research in Social Online Networks regarding the theoretical approach (Chen et al., 2015; Hobfoll, 1998) and the unique research design.

2. Commerce and crossover of resources

Chen et al. (2015) apply the COR theory (Hobfoll, 1989) and the Crossover Model (Westman, 2001) to explain the commerce and crossover of resources in groups and organizations. According to COR

theory resources include objects, conditions, personal characteristics, and energies that are either directly or indirectly valued for survival (Hobfoll, 1998). One basic assumption of COR theory is the premise that even if there is no stress, a person will be motivated and "directed biologically, socially, cognitively and culturally to shepherd their resources to obtain, retain and protect their resource caravans" (Chen et al., 2015, p. 97). The term *commerce* of resources expresses "the exchange of valued social, personal, and material resources" (Chen et al., 2015, p. 96), which are displayed in COR theories' crossover models (Hobfoll, 1998). Crossover models (Westman, 2001) show the dynamics of exchanging experiences, emotions, and resources within social contexts and describe possible mechanism for resource commerce or exchange, respectively, in resource caravans (Buchwald & Hobfoll, 2013; Chen et al., 2015). Caravan passageways are "the environmental conditions that support, foster, enrich, and protect the resources of individuals, families, and organizations, or that detract, undermine, obstruct, or impoverish people's resource reservoirs" (Hobfoll, 2011, p. 129). Chen et al. (2015) further explain the crossover model's role for caravan passageways on the basis of the common stressors mechanism (Westman, 2001): In shared environments people may experience common stressors. Chen et al. (2015) conclude that "common positive events or common positive characteristics of the team or organization may likewise impact team members and employees across the organization" (p. 101). Accordingly, not only the team's resilience may improve through the commerce and crossover of resources, but also an individual's resilience might be strengthened by the crossover and commerce of resources within the group. In the present study, we assume that individuals gather in *Facebook* groups to deal with common stressors. Thus, we investigate the question of whether the dynamics of commerce and crossover of resources as well as communal coping virtually take place in *Facebook* groups. By conceptualizing these virtual ways of communal coping, we interpret and predict positive and negative effects of coping on *Facebook*.

3. Method

The aim of this qualitative, exploratory research was to identify structures of communal coping processes in *Facebook*. A content analysis is used and focuses on available and transferable resources on *Facebook* and how *Facebook* members invest and gain resources in virtual social interactions. Therefore, a heterogeneous sample was interviewed in order to gain a distinct picture of these often diverse processes. There are three parts to the study design: (1) a face-to-face episodic interview (Flick, 2011), (2) the "thinking aloud" method implied in a live situation on *Facebook* and (3) an association task.

3.1. Sampling procedure and participants

For the qualitative exploratory analysis, a heterogeneous sample was needed whose diverse behavioral patterns would enable us to identify theoretical structures of coping on Facebook in their different manifestations. The sampling procedure combined the three sampling strategies of purposive sampling following a sampling plan, snowball sampling and theoretical sampling. The starting point for the sampling was a sampling plan. The sampling plan involved criteria concerning (1) age, (2) gender, (3) attitude towards Facebook (positive/negative), (4) primary use of Facebook i.e., news, messenger, etc., and (5) frequency of Facebook use. For each criterion we recruited at least one female and one male participant. The criterion age comprised six age groups: 14–19 years, 20–29 years, 30–39 years, 40–49 years, 50–64 years and older than 65 years. The criterion positive/negative attitude towards Facebook should avoid biases and one-sided perspectives on our research topic. Furthermore, the sample should be heterogeneous in terms of the features primarily used on Facebook in order to gain a wide-ranging picture of possible coping processes on Facebook. Also, the intensity of Facebook use might be relevant for coping on Facebook.

Table 1
Sampling plan.

Sampling plan	M	F
Age		
14–19		
20–29		
30–39		
40–49		
50–64		
65 and older		
Attitude towards *Facebook*		
Positive		
Negative		
Primarily used features		
Groups		
Fan-pages		
Social games		
News feed (comments, status updates, sharing, consuming)		
Messenger/Chat		
Professional use (represent one's company or business on *Facebook*)		
Intensity of use		
Less than an hour per week (no daily use)		
Several hours per week (no daily use)		
Less than 30 min on a daily basis		
30–60 min on a daily basis		
1–2 h on a daily basis		
More than 3 h on a daily basis		

Thus, the sample should comprise people, who spend less than an hour per week on Facebook, but also people, who engage on the site 3 h or more per day. Table 1 presents our sampling plan.

The sampling procedure ensures that the sample comprises persons showing a maximum variation with respect to their individual ideas about *Facebook* and coping (Kelle & Kluge, 2010). Recruitment was conducted via snowball sampling (referrals of the study team members or of the interviewees) and direct recruitment. In course of the recruitment process, findings suggested to interview participants, who show a particular use of Facebook in times of stress or proactively. Hence, additionally theoretical sampling ensured that we gained enough contrasting cases to really complete the picture of the phenomenon under investigation (Przyborski & Wohlrab-Sahr, 2014).

The interviewees were asked to fill in a questionnaire regarding the criteria from the sampling plan. Thus, only after the interview was conducted, it could be allocated to a spot on the sampling plan. This led to redundancies for some criteria here. Still missing slots on the plan needed to be filled by direct recruitment by the study team within their Online Social Network. A recruitment letter informed about the research, data handling and the person in charge of any questions.

The saturation effect for the sampling plan was reached after 68 interviews. Each row, thus criterion, of the sampling plan (Table 1) was covered then. In addition, as many participants as necessary were interviewed to reach the point, when no more information was provided by conducting more interviews. Theoretical sampling led to more interviews in some subgroups of our sampling plan. For example, we interviewed 47 participants in the age group 20–29 years (Table 2) as these persons differentiated considerably regarding their behavioral patterns on *Facebook*.

Table 2
Age distribution of the study sample.

Age group	Number	Percentage
14–19	5	7%
20–29	47	69%
30–39	11	16%
40–49	2	3%
50–64	2	3%
65 and older	1	1%

It was possible to recruit participants for each age group, but with a different number of people in each group as Table 2 shows. It needs to be mentioned that for the purpose of this qualitative study, namely the investigation of the phenomenon coping on Facebook, the aim was not to reach representativeness of a population, but to interview Facebook users to gain individual theories by people of interest for the research question. Thus, the more coping takes place in a group (e.g. students), the more they might cope on Facebook. Hence, the extent to which the age group of 20–29 was represented in the sample differs from other age groups.

44% (N = 29) of the sample (N = 68) was male, 56% (N = 39) female. 51% of the sample claimed to have a positive attitude towards *Facebook*, 46% had a critical, more negative attitude towards the Online Network (3% did not answer this question). Concerning the criteria of the user's intensity of *Facebook* use, the sample shows the aspired heterogeneity (Fig. 1). The intensity was measured on a scale with six levels of intensity: (1) less than 1 h per week, (2) several hours per week (not on a daily basis), (3) less than 30 min on a daily basis, (4) 30–60 min on a daily basis, (5) 1–2 h on a daily basis and (6) more than 3 h on a daily basis.

3.2. Study design and procedure

The study design has been optimized to reduce the third-person effect (Davison, 1983; Fox & Moreland, 2015) created in previous interview studies (Braasch & Buchwald, 2015). The aforementioned three-part structure of the study procedure should foster the reflection process of the interviewee: The episodic interview (1) included four basic initial questions and prompts to initiate a narration by the participant with subsequent questions to maintain the conversation (Table 3):

The next step was the thinking aloud method (2) (Ericsson & Simon, 1993; Konrad, 2010) applied on a live tour through the participants' Facebook page. The participants logged into their Facebook page, acted as if they would be on a regular visit on their page and commented on the posts, news or messages displayed there. The participants were asked to comment on their feelings or thoughts when the situation showed a potential for important information concerning the research questions. This procedure allowed for a most authentic insight into the member's actions and thoughts on Facebook. Finally, the association task (3) completed the interview procedure by giving the participant the opportunity to give his or her opinion on the topic.

The interviews took place at the University of Wuppertal from July 2014 to February 2015. The interviewer informed the interviewee about the interview procedure, the recording and data handling. An information sheet, the consent form and a short questionnaire to survey demographics was given to the interviewee before the interview started. The interviews lasted 43–153 min. The audio files were transcribed, anonymized and the text material was imported to MAXQDA, a software program for qualitative data analyses.

4. Analysis

The textual data material was structured and analyzed via qualitative content analysis (Kuckartz, 2014; Mayring, 2010). The categorical framework for coding the material was developed deductively on the basis of theoretical approaches on communal coping by six researchers (Bodenmann, 1995; Chen et al., 2015; Hobfoll, 1998) and inductively on the basis of 30% of the material (18 interviews).

The complete categorical system comprises ten main categories. Main category (1) denotes the *Facebook user type* with subcategories related to personal motivation, attitude and behavioral patterns when using the side. Category (2) refers to *quantitative and structural aspects of social embeddedness* (see e.g., Cohen, Doyle, Skoner, Rabin, & Gwaltney, 1997; Greenglass, 2002; Kaniasty, 2012) and includes four subcategories: the quality structure of the online network (number of
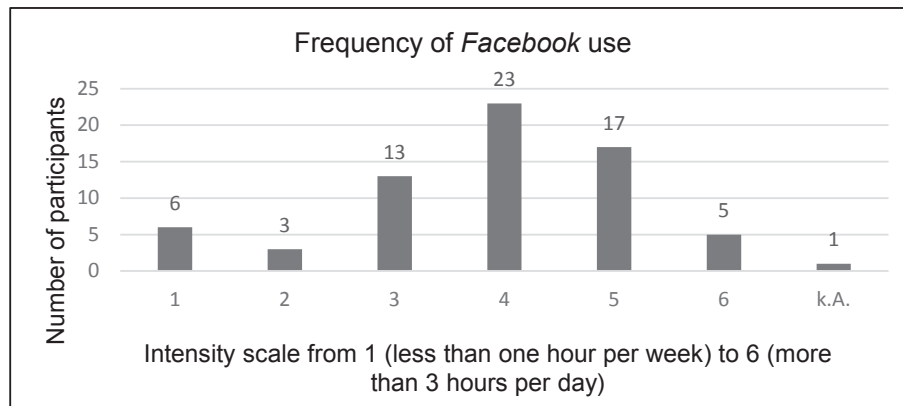
Fig. 1. Frequency of facebook use.

Table 3
Interview guidelines – episodic units (English translation).

Part I: *Tell me about your experiences with Online Social Networks.*
Part II: *Facebook is used very differently depending on the user type. How would you describe yourself as a user of Facebook?*
Part III: *In Facebook it is possible to build up a social network, which can become very complex. Can you describe your social network on Facebook?*
Part IV: *Do you remember a stressful event that happened to you since you are on Facebook? What did you do on Facebook during this time?*

Table 4
Intercoder reliability.

	Cohen's Kappa (main categories)	Cohen's Kappa (subcategories)
Interview 1	0.69	0.62
Interview 2	0.72	0.65
Interview 3	0.71	0.64

results show a consistent agreement with the application of the coding scheme (Wirtz & Caspar, 2002; see Table 4).

5. Results

Results showed how participants use their groups to cope with different stressors. *Facebook* groups constitute a network within each person's *Facebook* network, which may exceed the personal network's complexity by far. *Facebook* allows building bridges (Granovetter, 1973) to these unknown contacts and these give rise to resources for the individual which help them cope with a specific stressor.

A *Facebook* group may also be a subgroup of a user's individual network and thus comprises mainly known members. These smaller specific *Facebook* groups are mostly created for a special purpose, e.g. a university group (see Table 5). In such a group few students, who attend the same course at university, meet virtually to work on the course's content collaboratively. Our findings show that *Facebook* groups have special value to *Facebook* users, when it comes to coping with a stressor. Structuring the statements from these categories, we identified several types of *Facebook* groups. See Table 5 for the *Facebook* groups we derived along with the functions they have for making resources available:

Local *Facebook* groups are an example of the aforementioned large type of groups with a multitude of members exceeding the number of persons in the individual *Facebook* network. Our interviewees explained the value of these local groups through many different kinds of special resources. For example, people, who recently moved to a new place, can join local groups on *Facebook*, can get in touch online with people in the new place, and they can construct a social network (Buchwald, 2017). The strong interplay between online and offline life becomes apparent: *Facebook* serves as a mediator for the initiation of a resource gain, when an individual meets a virtual contact in real life. Our participants mentioned many more types of resources which they retained through local *Facebook* groups, such as, objects (buying, trading or giving away personal belongings in the vicinity), information (about shops, offices, bureaucratic matters etc.), personal resources (feeling of belonging to a city, developing local patriotism) and conditions (e.g. job offers, social support through finding sports groups or new contacts). The example of local *Facebook* groups shows how these complex networks function as condition resources (Hobfoll, 1998) and offer their members numerous

friends, strong, weak, latent ties, groups, family members), the network, which was actually recruited for social support online (inductive category), network management (inductive category about maintaining one's list of contacts, organizing one's network) and emotional appreciation of the online network (inductive category concerning a person's feeling of belonging to the online social network). Main category (3) *preventive coping and resource reservoirs* was directly developed from the literature (Chen et al., 2015; Hobfoll, 1998) and includes four types of resources (Hobfoll, 1998) with a special focus on giving social support to *Facebook* friends. The subcategories had been divided into further subcategories: first, deductively on the basis of social support theories (Cohen, 2004; House & Kahn, 1985; Schwarzer, 2000). These theories categorize social support into instrumental, emotional and informational social support. Second, there was an inductive category added regarding *Facebook*-specific social support, for example liking or commenting a person's status in a supportive kind of way. The category of (4) *individual coping* comprised statements about how users imply *Facebook* for coping either in a problem-oriented or emotion-oriented way (Lazarus & Folkman, 1984) detached from their social network. In main category (5) *communal coping* theories were implied to deductively develop subcategories according to the coping approaches from Bodenmann (1995) and Hobfoll (the multiaxial coping model; Hobfoll, 1998). In the coding process, the statements of the interviewees were allocated to a subcategory. Later in the analysis, the findings within each of the categories have further been investigated, sorted and allocated into new concepts originating from the textual data given. These new concepts are part of our results. Category (6) is *retrospective coping* (inductive category), (7) refers to *gain and loss spirals* (Hobfoll, 1998), (8) to *stress development through Facebook* (inductive category), (9) to *internal and external assessment of Facebooks potential to successfully cope with stress* (inductive category) and (10) to *implicit behavioral norms* (inductive category; see Braasch, 2018). The results presented in this paper originate from the categories (2), (3) and (5).

The intercoder reliability was calculated on the basis of three randomly selected interviews, each of which was coded by two researchers using the categorical framework. To secure the reliability of the instrument, Cohen's kappa was calculated for all main categories (N = 10) as well as for the detailed subcategories (N = 103). The

Table 5
Facebook groups and functions.

Facebook Groups:	Resources available:
I. Local Facebook Groups	- Exchange of object resources (buy, trade or give away objects like books, media, technology and the like), information (about local issues) - Social Support becomes available (in case of moving to a new place new contacts can be established more easily)
II. University/School Class Groups - More specific subgroups (like study groups for specific aims), interdisciplinary groups for general information, student residences etc.	- Study-related resources (information, material, objects) - Social exchange, cooperative work and communal coping with a stressor (e.g. an exam)
III. Work-related groups	- Personal resources (developing feelings of identification with the job, self-efficacy on the job), information, energy resources

IV. Hobby-related groups
Offline-Network-Groups
 - Private, close ties (for planning activities, parties, reunions e.g.)
  • Weak and strong ties as a target group (e. g. class mates for a reunion)
  • Groups for a special occasion (birthday of a person in the network, carnival, bachelor/ette parties etc.)
	- Increasing camaraderie and feelings of community (perceived social support)
	- *Facebook* as an additional means of communication

VI. Common goal groups (e.g. athletic goals, diets)	- Motivation, sense of community, solidarity, Social Support

opportunities to enrich their resource pool.

University- or school-related subgroups exemplify the smaller type of *Facebook* groups which comprise known people. These groups are formed for a special purpose such as the preparation of a presentation at school or university. The participants emphasize the gain of time resources through *Facebook* groups in this context. Collecting information and material is no longer dependent on time or space. Thus, the group members can join the virtual group whenever they want to contribute something. Quick responses can easily be made during a bus ride or at home without a face-to-face contact. The need for real meetings decreases and fewer meetings are necessary. Additionally, the interviewees said that they appreciated the structure and transparency of working in *Facebook* groups. For example, communication is in *written form* and can easily be traced back in case of uncertainties. Furthermore, important materials can be uploaded in the *Facebook* group, become directly available for each member of the group, and cannot get lost. Therefore, these groups are able to reduce potential stressors, such as lack of time, loss of material or information or difficulties in informing each member of the group equally. They preserve resources which otherwise – without *Facebook* groups – needed to be invested to make a study group work.

There are many more types of groups with different dynamics on how to exchange resources and how to make communal coping work virtually (see Table 5). To conceptualize these heterogeneous findings in order to get a clearer and more general picture of these dynamics, we established a link between the approach of the commerce and crossover of resources (Chen et al., 2015) and communal coping theories (Bodenmann, 1995): We identified four primary types of communal coping in Facebook groups: individual coping, delegated coping, commerce and crossover of resources (Fig. 2):

The already mentioned example of *Facebook* study groups shows how *delegated coping* can work in virtual settings. Subtasks can be delegated to the group members by one person, e.g. the moderator of the study group. Each member of the group then copes individually with the delegated subtask. In the next step the prepared subtasks can be collected in the *Facebook* group to solve a more complex task (a stressor, e.g. an exam, presentation, or a holiday camp organization).

A *crossover of resources* occurs when an individual does not need to invest resources in the group but can receive resources that are *offered* by the *Facebook* group members. An example of this type of communal coping in *Facebook* groups can be found in large university groups, e.g. called "Psychology". In this group, all information regarding the department staff and topics of interest for psychologists can be gathered. As there are many students (and also often teachers) in the group, the individual often does not need to invest resources for the group but can only retain resources in a passive way.

Instead, communal coping by the commerce of resources does not

tolerate to passively retain resources without investing (Chen et al., 2015). For example, a learning group preparing for an exam all equally contribute to the resource pool by digitalizing and uploading their personal lecture notes to make them available for all group members. Other forms of contributions can be via sharing research results, learning videos or additional literature. Here, the members enrich their resource pool through cooperative actions. Our interviewees strongly emphasize that people who do not actively contribute will not be welcomed. They were dismissed from the group or the whole group stops functioning. Group members who effectively contribute resources described such behaviors as a rule violation and stopped offering their resources. This dynamic might occur when *Facebook* groups exceed a certain number of members which promotes anonymity. As more and more members stop sharing, the commerce of resources stops and the *Facebook* group loses its purpose and perishes.

Finally, many interviewees described how their individual coping efforts were strongly influenced by *Facebook* groups, which leads to communal coping, such as, self-help groups in real life. Persons who share a common stressor such as test anxiety need to cope with it individually. The resources available in these groups are primarily emotional: emotional social support, shared feelings of belonging or being bolstered by experienced people who already coped with it successfully. Emotional and informational support (shared experiences with the stressor) constitute the valued characteristics of these *Facebook* groups for individual coping efforts.

6. Discussion

The present study is part of the research field of online coping. Egan and Moreno (2011) argue that *Facebook* is used by people to inform others about their stressors. Wright (2012) found that online perceived social support reduces stress and Nabi et al. (2013) confirm that with an increase in *Facebook* friends the perception of social support increases. Tompoulidis (2015) showed that even just communicating about a stressor on *Facebook* reduces the feeling of being stressed. Findings of Braasch and Buchwald (2017) revealed that *Facebook* functions as a resource pool and offers its users a potential for personal, energy, condition and object resources. In the present study we focused on *Facebook* groups as a source of resources and further explored the dynamics of online communal coping. In this qualitative study we explored how resources are shared and transferred using a model of commerce and crossover of resources.

The results underline the value of *Facebook* groups when the Online Social Network is integrated into the users' coping processes. The interview data and content analyses' findings reveal the heterogeneity of *Facebook* groups and their functions and documents the availability of many different resources. *Facebook* groups pursue different goals and
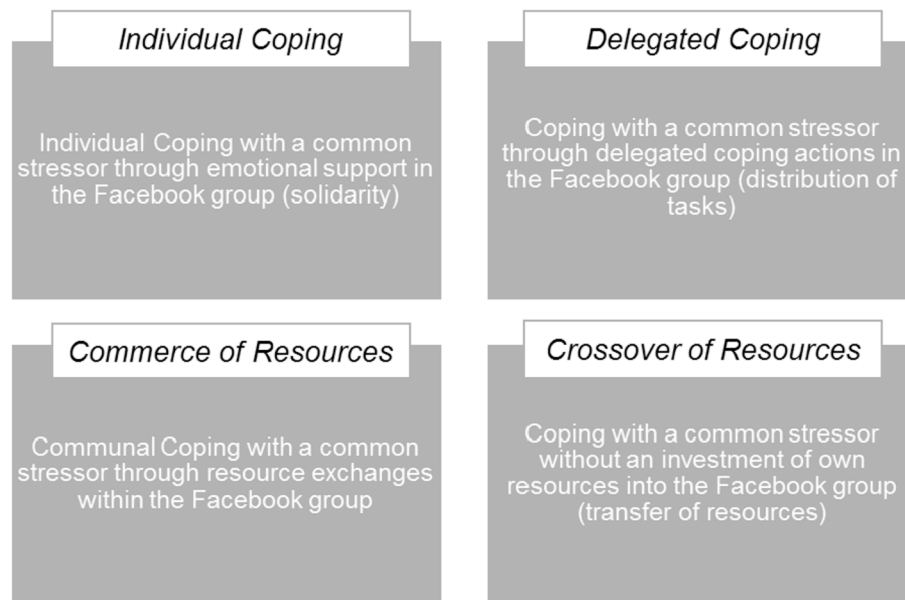
Fig. 2. Communal coping in facebook groups.

set different behavioral norms. They might provide a variety of resources, appropriate for the very specific stressor dealt with in a specific *Facebook* group.

Furthermore, we categorized the interviewees' descriptions of how they use *Facebook* groups for coping into four basic online communal coping dynamics. These are four ways of enriching one's resource pool by interacting in a *Facebook* group that is connected by a common stressor. Our study confirms the dynamics depicted in the crossover of resources approach by Chen et al. (2015) for the virtual context in *Facebook*. Individuals may experience communal coping process through the crossover and commerce of resources within a virtual group on *Facebook*.

The content analysis of the participants' statements regarding their use of *Facebook* groups indicated a mostly positive attitude. In *Facebook* groups their resource pool was replenished whereas individual online coping within the personal *Facebook* network was often associated with more negative side effects (Braasch, 2018). This perception might be due to the more autonomous and individual approaches and options in *Facebook* groups. Participants reported a targeted use of *Facebook* groups only for specific reasons. To become a member of such a group might be either a proactive or direct way of coping (Greenglass & Fiksenbaum, 2009). A proactive coping behavior was reported, for example, in large university-related groups, where crucial information might be shared some day. Although these groups were mostly used in a passive way, the participants reported gaining crucial resources in the form of information and knowledge. Chen et al. (2015) describe the phenomenon, when it comes to a resource gain without the need of investments, as crossover of resources. It seems to be a secure way to protect one's own resources and at the same time enrich one's resource pool also on *Facebook*.

Furthermore, *Facebook* groups were involved in direct coping through the *commerce of resources*. The interactional dynamics here are more complex and the resource gain is not guaranteed. Participants reported this kind of coping for common stressors in groups, where each individual actually contributes in some way to the group and hence invests resources in order to gain other or more resources. For example, *knowledge* can be fostered or expanded in study groups where people share each other's information on an exam topic. The groups in this category of our content analysis typically were of smaller size. Also, group members who did not invest resources but passively absorb them were not tolerated for long.

Summarizing, the findings promise a high potential for functional communal coping in an online environment like *Facebook*, provided that the users adapt to the particular group rules. What needs to be emphasized here is that we are focusing on the way of *coping with stress* on *Facebook*. Naturally, there is another side of the medal and *Facebook* groups can easily become *stressor* themselves. Although our findings regarding *Facebook* groups were mostly positive, future research should also focus on negative effects and how people can lose resources on *Facebook*. Empirical evidence that *Facebook* causes stress already exists, e.g., through envy on *Facebook*, breakup distress or social overload (Krasnova et al., 2013; Lukacs, 2012; Maier, Laumer, Eckhardt, & Weitzel, 2014). Consequently, we expect a potential for resource loss in *Facebook* groups as well, which needs to be investigated further. In one of our interviews it became clear what an immense loss of resources can occur when social support is requested but there is no reaction to the request: This could have a negative effect on the person's self-efficacy, he or she may feel left alone with the problem. This results in a loss, where a gain was actually necessary to escape the spiral of losses (Hobfoll, 1998).

Accordingly, whether a person experiences coping in *Facebook* groups as positive or negative depends on many factors. These and other research findings should help *Facebook* users to reflect on their behavior and to learn about the consequences their actions might have in the virtual world. People, who integrate *Facebook* into their daily routines should learn to manage *Facebook* experiences and activities in a psychologically healthy way (Fox & Moreland, 2015).

The specific peculiarity of communal coping dynamics on *Facebook* lies in the composition of the groups: Strong, weak and latent ties, as well as people unknown to each other and from more distant networks, profit from possible bridges building across and beyond one's personal social network (Garton, Haythornthwaite, & Wellman, 1997; Granovetter, 1973; Haythornthwaite, 2002). Local *Facebook* groups, for instance, exemplify a community where mostly complete strangers virtually meet, but in the course of the group interaction may establish latent, weak and even strong ties. According to our interview data, this process is often accompanied by additional face-to-face interactions. However, bridge building starts in the *Facebook* group. These bridging into hitherto unknown networks enables access to social support, which was formerly not available. This is particularly important for individuals when the support from the real world is insufficient or inadequate or the online network allows for a more targeted and thus

time resource-saving way of seeking support. This finding is consistent with research results regarding online social support in virtual support groups (Pfeil, Zaphiris, & Wilson, 2009; Bender, O'Grady, & Jadad, 2008).

We conclude that while *Facebook* does not offer anything exceptionally new, the scope of potential networks and network members, as well as the circumstances in which these communities (groups) develop, can be extensive. This needs further investigation.

7. Limitations and future directions

The present findings are part of an exploratory study about coping on *Facebook*. In order to explore the primary research question, how people use *Facebook* to gain resources or to cope with a stressor (Braasch, 2018), the study's design was developed to generate data for an exploratory content analysis. Thus, the findings presented here are of inductive origin, generated from the empirical data and can only shed a first light on communal coping processes on *Facebook*. We hope to encourage further research which might dive into particular *Facebook* groups and investigate how members interact, invest, gain and lose resources when coping with a common stressor. How are social bridges and networks built in a virtual room and what kind of social support may result?

Future research could incorporate, e.g., a more distinct and selected sampling to allow for more specific results. Here, a limitation of this research needs to be pointed out which results from the composition of our sample. Though there is no claim of representativeness of a sample in qualitative research, the phenomena explored in this study originated from the narratives and opinions of our sample group, which consisted of 27% people with no academic background and a majority of students (54,41%). Therefore, our findings should be interpreted with the background of these limitations. We need to consider the possibility that a more non-academic sample might show a different coping behavior on *Facebook* groups. It would also be interesting to examine a sample that had to cope with a particular critical life event, i.e., loss of a child or a natural disaster.

Future research could focus on resource loss in *Facebook* groups and on dysfunctional communal coping. Though we did not find evidence for the idea that *Facebook* groups cause resource loss or support dysfunctional coping, this finding could result from the limitations of our study. That is namely the rather unspecific perspective in our research and the heterogeneous and hence broad sample group. A focus on *Facebook* groups coping with a particular stressor, a more in-depth analysis of the coping dynamics in these groups may reveal also detrimental interactions. Depending on the sensitivity of a topic, resource dynamics can vary decisively. Pedagogical counseling regarding the functional use of *Facebook* groups could advise people whether to seek support there and how to use these groups for positive outcomes.

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