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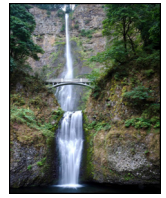
Experiencing place-change: A shared sense of loss after closure of village facilities

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ABSTRACT

Rural communities often display strong emotions in response to closures of facilities and services. Research into explaining community responses hardly pays attention to the socio-psychological process of 'loss' of such local facilities, which occurs when place bonds are disrupted. This paper explores how a rural community makes sense of place-change by examining how residents interpret, evaluate and cope with local facility-decline. Three focus group discussions were conducted in Tzummarum, a village in the Netherlands, just after the closure of a local sports hall was announced. A theoretical framework for community coping-responses is used to interpret the empirical results. We find that while the closure of local facilities can result in a disruption of individual place bonds, there is a discernible shared sense of loss based on the social and symbolical meaning that certain facilities have for the village community. This sense of loss can help explain collective coping responses. However, this study found that collective action is only considered for local facilities that foster a sense of community, provided there is enough collective efficacy.

1. Introduction

Our living environment is constantly changing due to cultural, societal, economic, environmental, technical and political developments. There is a growing body of literature on how various global and local processes can cause place-change and how people interpret these changes (e.g., Clarke, Murphy, & Lorenzoni, 2018; Di Masso et al., 2019; Woods, 2007). One such example of place-change is the decline of basic facilities and services in villages and small towns due to population decline, increased car-ownership, economies of scale and restructuring policies (Amundsen, 2015; Li, Westlund, & Liu, 2019; McShane, 2006; Paddison & Calderwood, 2007; Peters et al., 2018). The closure of local schools, libraries, swimming pools or supermarkets is often met with protests and negative reactions, especially in rural communities (Barnett & Barnett, 2003; Kearns, Lewis, McCreanor, & Witten, 2009; Woods, 2003). It is widely believed that reduced availability of local facilities negatively impacts 'liveability' (Antognelli & Vizzari, 2017; Davern et al., 2017) which can be defined as the quality of life in a region based on physical and social dimensions (Namazi-Rad, Perez, Berryman, & Wickramasuriya, 2016). However, liveability is dependent on an array of local values in which the availability of facilities and services only plays a partial role (Ruth & Franklin, 2014; Namazi-Rad, Perez, Berryman, & Lamy, 2012 & 2016). Moreover,

residents can regret the closure of a facility, while they do not actually *use* the provided service (Christiaanse & Haartsen, 2017). A potential explanation for negative responses to place change may be attributed to the psychological bonds that people have with places, such as place attachment or place identity (Devine-Wright, 2009; Manzo & Perkins, 2006). The closure of rural facilities could be perceived as a negative event because they often have special meaning for individuals and communities (Christiaanse & Haartsen, 2017).

To understand community responses to facility-decline it is important to study the socio-psychological process that drives these responses. However, the *process* of how a community copes with the disruption of place bonds due to facility-decline is underexposed in various fields. In the rural geography and community development facility-decline is often studied in relation to social ties (Gieling, Haartsen, & Vermeij, 2019), social capital (Elshof & Bailey, 2015; Farmer, Nimegeer, Farrington, & Rodger, 2012) or social cohesion (Witten, McCreanor, Kearns, & Ramasubramanian, 2001) or the focus lies on community reactions (such as protective action, participation or protest) to facility closures (Barnett & Barnett, 2003; Kearns et al., 2009). In contrast, the field of environmental psychology pays ample attention to the process of attachment and disruption of place bonds. The object of attachment is often the home (Chow & Healey, 2008; Jorgensen & Stedman, 2001), neighbourhood (Bernardo & Palma-

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Oliveira, 2013; Hidalgo & Hernández, 2001), city (Belanche, Casaló, & Flavián, 2017), community (Brehm, Eisenhauer, & Krannich, 2004; Cook, Martin, Yearns, & Damhorst, 2007; Mihaylov & Perkins, 2014) or nature/landscape/wilderness (Brown, Raymond, & Corcoran, 2015; Carrus, Bonaiuto, & Bonnes, 2005; Kyle, Mowen, & Tarrant, 2004; Raymond, Brown, & Weber, 2010). Although some studies refer to the importance of local facilities for a community (e.g. Buffel et al., 2014; Howley, Scott, & Redmond, 2009), there are, to our knowledge, relatively few studies on the disruption of attachment to public places (except e.g., Di Masso, Dixon, & Pol, 2011; Di Masso & Dixon, 2015; Moulay et al., 2018) and almost no studies that examine attachment to local facilities (except e.g., Christiaanse & Haartsen, 2017). With this paper we intend to address this gap, by investigating how residents of a village community interpret, evaluate and cope with the disruption of place bonds caused by the closure of local facilities.

This paper investigates how a community experiences facility-decline in Tzummarum, a village in the north of the Netherlands. While many studies look at the disruption place bonds on an individual level (Manzo & Perkins, 2006; Mihaylov & Perkins, 2014), we investigate the socio-psychological process of how a village community makes sense of place-change. Although many experiences are personal, the attitudes that shape these experiences are often based on shared beliefs and social norms (Ajzen & Fishbein, 1977; Proshansky, Fabian, & Kaminoff, 1983) and community-members influence each other in their collective coping response (Bandura, 2000; Fritsche et al., 2017; Zomeren, Spears, & Leach, 2008). Moreover, intended behaviour is preceded by an (un) favourable attitude towards the (spatial) object, but also influenced by social norms and beliefs (Ajzen, 1991). We therefore used focus groups to study attitudes towards place-change. In this group setting place bonds are investigated on two spatial scales: 'local facilities' and 'the village'. Shared meanings and individual attachments can both influence coping responses (Anton & Lawrence, 2016). At a community level, rural facilities can have an important social and symbolic meaning for a village community (Amcoff, Möller, & Westholm, 2011; Cabras & Bosworth, 2014; Christiaanse & Haartsen, 2017; Kearns et al., 2009; Liepins, 2000; Svendsen, 2013). Closure of local facilities could therefore be perceived as a 'loss' for the community. However, affective and cognitive place bonds between individuals and specific facilities can also influence attitudes towards facility-decline (Christiaanse & Haartsen, 2017). This paper builds on existing literature on individual and collective responses to place change (Devine-Wright, 2009; Mihaylov & Perkins, 2014) for a theoretical framework. We illustrate the utility of this framework by presenting a thematic analysis of three focus group discussions. Finally, we conclude by discussing the theoretical and practical implications of our findings.

2. Coping with place-change

2.1. Disruption of place bonds

The bonds that people have with places are often investigated under the term 'place attachment' (Lewicka, 2011). In the qualitative tradition this concept is rooted in the broader 'sense of place', which can be defined as the *meaning* attached to a spatial setting through a processes of bonding (Cuba & Hummon, 1993; Shamai, 1991). Sense of place can be divided into three dimensions according to attitude structure: place attachment (PA), place identity (PI) and place dependence (PD) (Jorgensen, 2010; Jorgensen & Stedman, 2001; Lewicka, 2011; Pretty, Chipuer, & Bramston, 2003; Shamai, 1991). While these dimensions are strongly related and the distinction between them is debated (Anton & Lawrence, 2014; Lewicka, 2011; Knez & Eliasson, 2017), the general consensus is that PA is about affective bonds between people and places (Jorgensen & Stedman, 2001; Pretty et al., 2003), PD concerns behavioural intention (Stokols & Shumaker, 1981) and PI relates to the cognitive relationship based on (shared) beliefs, knowledge and thoughts (Fried, 2000; Gustafson, 2001; Proshansky et al., 1983;

Twigger-Ross & Uzzell, 1996). Although some place bonds might influence reactions to place-change more than others (Hidalgo & Hernández, 2001; Jorgensen & Stedman, 2001), this paper follows a more holistic approach since the three dimensions are interrelated (Chow & Healey, 2008; Relph, 1976), and place-bonds can simultaneously encompass various spatial scales (Manzo & Perkins, 2006; Canter, 1997). Various places can actually form a "web of meaning" (Manzo, 2005, p. 76). We therefore borrow theoretical concepts from literature on Sense of Place, but also from studies that view PA as encompassing affective, cognitive and behavioural components (e.g. Altman & Low, 1992; Devine-Wright, 2009; Scannell & Gifford, 2010).

The loss of an important place can disrupt place bonds (Bonaiuto, Carrus, Martorella, & Bonnes, 2002; Devine-Wright & Howes, 2010; Inalhan & Finch, 2004), thus triggering feelings of grief (Chow & Healey, 2008). While the attachment to social and physical aspects of places is often distinguished (e.g., Scannell & Gifford, 2010), various functional, physical, social, economic and symbolic features of place can actually be important (Christiaanse & Haartsen, 2017). Any change in these features, real or even imagined, can be perceived as a 'loss' (Reese, Oettler, & Katz, 2019) after which people can display coping responses such as protective action (Manzo & Perkins, 2006), but also acceptance, adaptation (van der Land & Doff, 2010) or resignation (Barnett & Barnett, 2003). In 1992, Brown and Perkins introduced a three-stage model for the disruption of behavioural, affective and cognitive ties between people or groups and the 'socio-physical environment'. This model consists of a pre-disruption, disruption and post-disruption phase. However, it overlooks how change is interpreted and evaluated. Devine-Wright (2009) suggests a model with five stages of the psychological response to place change, including becoming aware of change, interpretation, evaluation, coping and action. We argue that the closure of local facilities can be perceived as a disruption of various place bonds, which could influence responses to place-change. Cook et al. (2007) found that the closure of services was one of the many changes that rural communities experience, resulting in a sense of loss. Moreover, Belanche et al. (2017) showed that local facilities shaped '*urban* identity', which they defined as a higher order construct with affective, cognitive and behavioural attributes. It is likely that local facilities similarly contribute to *village* identity, and that closure can cause a disruption of place bonds to the village, as well as to the facilities themselves (see Fig. 1). It is important to realise that while *individuals* can experience a disruption of place bonds on various spatial scales, making sense of place-change is also a *community*-process that is largely shaped by various societal, cultural and other contextual factors.
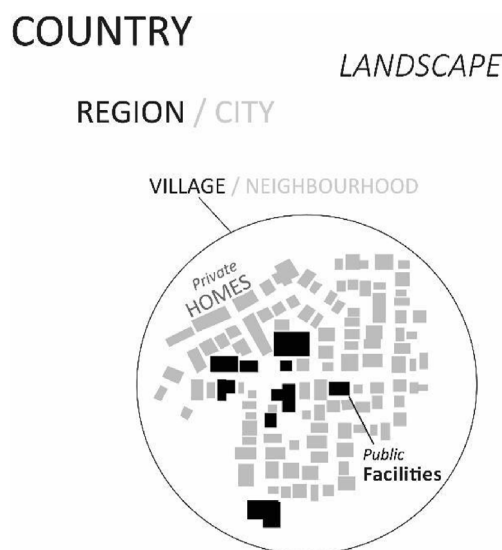

Fig. 1. Spatial scales at which place bonds can occur.

2.2. Communities coping responses to place-change

While strong attitudes and positive place-bonds influence resistance to change (Carrus, Scopelliti, Fornara, Bonnes, & Bonaiuto, 2014; Jorgensen, 2010), they are not the only factors that influence place-based behaviour. Attitudes and behaviour are partly shaped by group processes (Ajzen, 1991; Jans & Fielding, 2018), and levels of social capital can influence communities coping responses to place-change (Elshof & Bailey, 2015). Mihaylov and Perkins (2014) define four components of psycho-behavioural social capital that influence a collective response to disruption of place bonds: sense of community, neighbouring, participation and collective efficacy. We will briefly discuss these four components in relation to responses to place change. Social capital concerns the effectiveness of formal and informal social networks to provide opportunities and (re)act to a communities advantage (Manzo & Perkins, 2006). This ability of people (and communities) to react to changes in their environment, is greatly influenced by levels of efficacy (Anton & Lawrence, 2016; Foster, Pitner, Freedman, Bell, & Shaw, 2015) or 'perceived behavioural control' (Ajzen, 1991). Self-efficacy is concerned with people's beliefs in their capabilities (Bandura, 2000) and collective efficacy refers to *"people's shared beliefs in their collective power to produce desired results"* (Bandura, 2000, p. 75)." High collective efficacy can motivate a group to actively engage in collective actions in the face of setbacks (Bandura, 2000; 2006; 1995; Zomeren, et al., 2008; 2009), provided there is hope for positive change (Cohen-Chen & Van Zomeren, 2018). This adaptive behaviour and ability to cope with change can also be viewed as social or community resilience (Adger, Hughes, Folke, Carpenter, & Rockström, 2005; Berkes & Ross, 2013; Magis, 2010; McManus et al., 2012).

It makes sense that a community's response to unwanted facility-closures is influenced by collective efficacy. However, there are many socio-cultural characteristics that influence how communities cope with place-change. For instance, Roussi, Rapti, and Kiosseoglou (2006) have found differences in a community's coping behaviour between rural and urban communities. The *strength* of a group's social identity (Zomeren, Spears, et al., 2008) or 'sense of community' (Roussi et al., 2006) also influences how communities cope with problems in their living environment. Sense of community can be defined as feelings of belonging to a (place-based) community (Mcmillan & Chavis, 1986) or to a group with whom a person shares memories and an affective connection (Manzo & Perkins, 2006; Perkins & Long, 2002). Social interactions such as neighbouring and participation are crucial in this equation, because they increase a sense of community (Wilkinson, 2008) and shape place-meanings (Jorgensen, 2010). This is partly because meaning is created based on shared values, ideas, metaphors, beliefs and practices (Proshansky et al., 1983). Elshof and Bailey (2015) found that community responses such as entrepreneurial behaviour, could mitigate the feelings of 'loss' that resulted from perceived population decline, facility-decline and liveability decline in rural areas in the Netherlands. However, in communities with low social capital a collective response can also be one of detachment or resignation. To illustrate how place bonds, contextual factors and aspects of social capital all tie together leading to a community's response to place-change, we will introduce a theoretical framework.

2.3. Theoretical framework for collective responses to place-change

Fig. 2 illustrates the socio-psychological process of how a community makes sense of place-change. It is based on Mihaylov and Perkins (2014) three-stage framework for community responses to an 'environmental disruption' (disruption, interpretation and response) and Devine-Wright's (2009) five-stage model of psychological response to place-change (becoming aware of place change, interpretation, evaluation, coping and acting). We argue that 'evaluation' and 'coping' are crucial stages to include in a theoretical framework leading up to collective action, because it adds insights into the socio-psychological

process of adapting to place-change. We therefore separate Mihaylov and Perkins' (2014) 'interpretive processes' into two parts (see Fig. 2). After place-change occurs (stage 1), change is interpreted based on the *meaning* of this place for individuals and the community (stage 2), which is shaped by cognitions, affect and behaviours and various place characteristics. Individual, communal and cultural variables such as local traditions and socio-cultural norms also influence how place-change is interpreted. People often instinctively evaluate the outcome of place-change in varied levels of positive or negative (stage 3), before the second interpretative (coping) process starts which is influenced by various aspects of social capital (stage 4). However, social interactions and levels of social capital can lead to re-evaluation of place-change before the coping-process continues. We argue that next to collective efficacy, personal efficacy should also be included since both influence coping responses (Anton & Lawrence, 2016; Bandura, 1995). Moreover, we do not define the different aspects of social capital as input or output, but as *part of* the interpretive processes. The model can be applied to various geographical scales and contexts.

It is important to note that while Mihaylov & Perkins and Devine-Wright seemingly suggest a linear process, we propose that the process is cyclical. Place-change is constantly re-evaluated based on social interactions and the outcomes of responses (stage 5). For instance, place-change can be denied (Bonaiuto, Breakwell, & Cano, 1996), analysed (Ruiz & Hernández, 2014), or accepted (Barnett & Barnett, 2003; van der Land & Doff, 2010). However, when the threat of place-change is met with met with collective protective actions, this can lead to increased participation in a community, which can in turn influence levels of PA (Anton & Lawrence, 2014) or place meaning (Jorgensen, 2010). Moreover, the whole process is in constant flux: self-efficacy and community support can have mediating effects on senses of loss (Cook et al., 2007), place bonds themselves are not stable but change over time (Brown & Perkins, 1992; Cook et al., 2007), and the same place-change can disrupt place bonds for some people, but not for others (Devine-Wright, 2014). Although our framework takes place-change as the starting point it also illustrates that change be ignited by various cultural and societal processes which also directly influence place-bonds (e.g., Di Masso et al., 2019). Moreover, while Mihaylov and Perkins (2014) distinguish separate 'community and individual level variables', we argue that individual, cultural and community characteristics influence all stages of the socio-psychological process of adapting to place-change, since there is also a constant interplay between personal and social identities (Cohen-Chen & Van Zomeren, 2018; Fritsche et al. (2017).

3. Methods

3.1. Research design

This paper investigates how residents of a village community interpret, evaluate and cope with the closure of several local facilities. We choose to investigate these interpretive processes (that precede community responses) by conducting a qualitative analysis using focus groups, since this method is useful to identify community norms, views and behaviour (Hennink, Hutter, & Bailey, 2010), but also to observe the interaction between group members (Cook et al., 2007). We explore the role of place meaning and different functionalities of village facilities, and hypothesize that various place bonds might be disrupted, thus shaping the perception of local facility closures. The approach of this study is not embedded in a specific methodological tradition. The discussions of the focus groups are meant to uncover (shared) meanings and interpretive processes (Levitt, Motulsky, Wertz, Morrow, & Ponterotto, 2017), and are later thematically analysed by allowing patterns to emerge from coded transcripts (Vaismoradi, Turunen, & Bondas, 2013). The theoretical framework was made after data-collection, supported by empirical findings. While this can be seen as an inductive approach, we also needed a discussion guide to be able to

5-STAGE FRAMEWORK FOR COMMUNITY RESPONSES TO PLACE-CHANGE
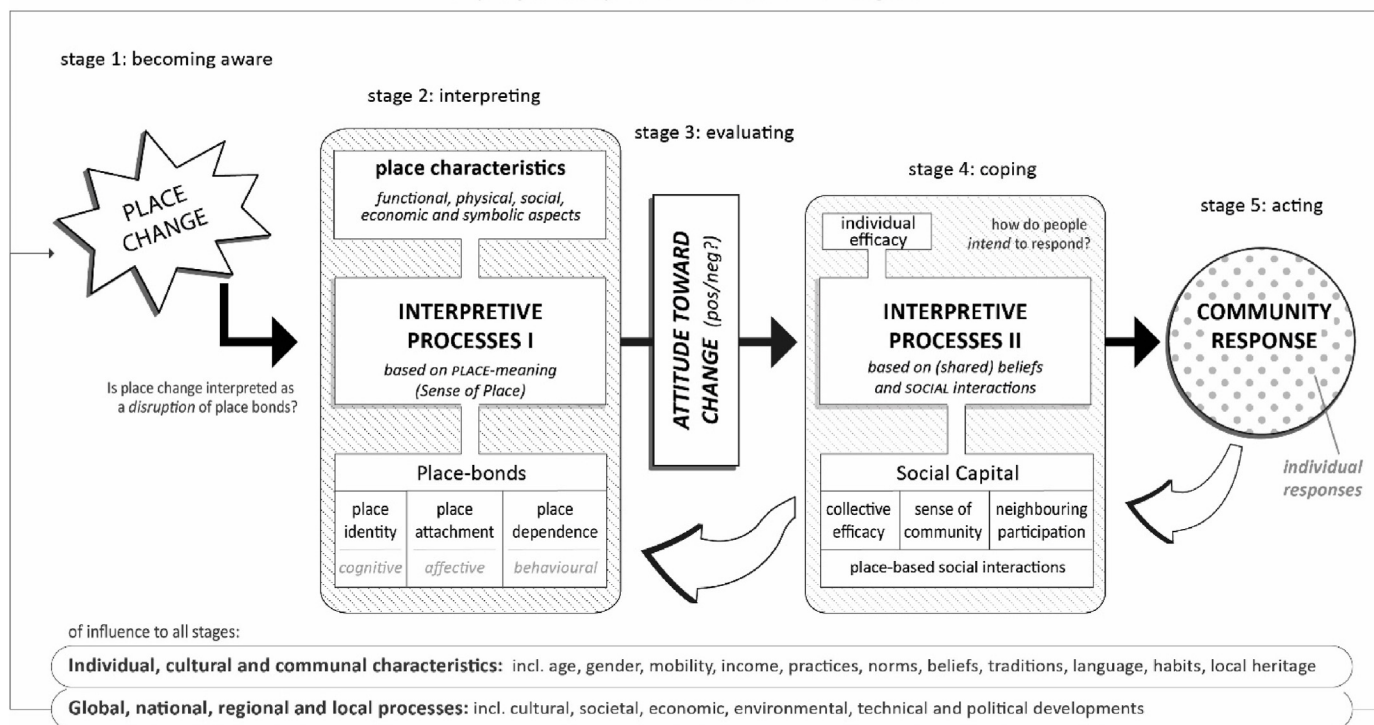adapted from Mihaylov & Perkins 2014 & Devine-Wright 2009

Fig. 2. Theoretical framework for the socio-psychological process that precedes a community's response to place-change.

compare the results of all three focus groups (see Appendix A). Instead of a strict distinction between inductive and deductive strategies (Pratt, 2009), we argue that it is more important to keep an open mind and clearly describe the research process.

3.2. Case: the closure of several facilities in Tzummarum

Tzummarum is a village in the northwest of the Netherlands in the Province of Fryslân (see Fig. 3). Tzummarum has a history of fishery and agriculture, but nowadays it is mostly a residential commuter village. It is located in a region that, since 2009, has been marked by the national government to deal with the effects of population decline. In 2017 Tzummarum had a population of 1350 people and had experienced a population decline of 7% over 8 years (Statline.CBS.nl Bevolkingsontwikkeling, 2020). In the last two decades many facilities and services closed, such as shops, a bank, post-office, swimming pool, supermarket and cafe (see Fig. 4). At the time of this study (summer 2017) the public and Christian school were in the process of merging. The sports fields have a canteen that allows for some, but few, activities and there is a Christian cultural centre in the former church that is used exclusively by the local Christian fanfare/orchestra. In 2016 the elderly nursing home almost closed, but eventually it was renovated and expanded with detached senior homes. Tzummarum does not have a town hall or official community centre, and in the spring of 2017 it was announced that the indoor sports hall would close. To investigate if the sports hall could be converted into a multifunctional community centre, the local interest-organisation 'dorpsbelang' commissioned an online survey among residents of Tzummarum (response rate 50,3%, N = 604) and an architectural assessment of several buildings, to local consultancy firms Partoer and DBF in March 2017. The results of this study were published in a Dutch report (Stutterheim, Rodenhuis, Haasbroek, & Christiaanse, 2017) and presented to the village in august 2017. The first author of this paper assisted in developing the survey, and independently conducted three focus group discussions. These discussions form the empirical basis of this paper, but in the results-

section we occasionally refer to the survey results for context.

3.3. Data collection

A total of twenty-two participants were selected from the survey-respondents that indicated they were willing to participate in a focus group about the 'role and significance of different facilities for Tzummarum'. Three separate focus group discussions were held with six to eight participants. Participants were invited and grouped according to age, gender and length of residence, to gain different perspectives. The first group consisted of four men and four women, aged 18–30, with varied length of residence. These 'young' people were grouped together because similar experiences can foster a shared sense of identity and a dynamic discussion in which people feel more comfortable expressing their opinion (Hennink et al., 2010). The second group consisted of four men and four women, aged 33–73, with varied length of residence. The third groups consisted of four men and two women, aged 35–70, that all lived in Tzummarum their whole lives. This choice was made based on the premise that length of residence can influence levels of place attachment (Bailey, Devine-Wright, & Batel, 2016; Brehm et al., 2004) or place identity (Bernardo & Palma-Oliveira, 2013; Raymond et al., 2010; Twigger-Ross & Uzzell, 1996). The focus group discussions were held at the sports canteen in three consecutive evenings from 19:30–21:00 h, and were documented by video. The evening started with an introduction on how the data would be used, and informed consent was captured on the video. The first author of this paper moderated the discussion according to a discussion guide (see Appendix A), while allowing a free-flowing discussion. Each focus group was structured around reflections on the past, present and future of the village. Evaluative mapping was used to identify meaningful areas/places, since this method does not favour cognitive, affective or behavioural aspects (Jorgensen, 2010) and it fits a holistic approach. For more information on how evaluative mapping was used, see appendix A.
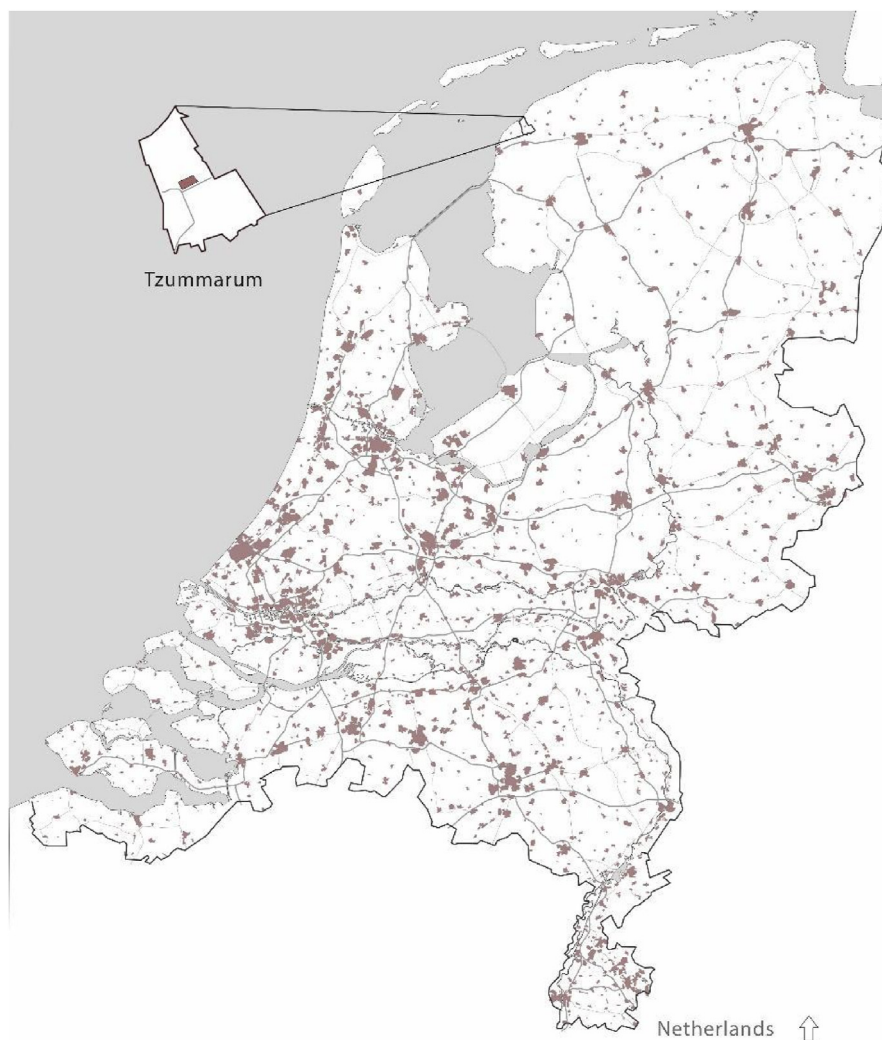
Fig. 3. Situation of the case study, Tzummarum, in the north of the Netherlands.

4. Results

A thematic analysis of the transcripts resulted in the emergence of three themes:

Theme I: Social and symbolic meaning of local facilities
Theme II: A shared sense of loss due to facility-decline
Theme III: Considering collective action for a community meeting place

In the next paragraphs we will illustrate the themes based on findings from the focus groups, using pseudonyms for the participants, and a number that indicates the focus group. The quotes are chosen and grouped together in a way that is meant to illustrate shared patterns that were present in all three focus group discussions.

4.1. Social and symbolic meaning of facilities

During the mapping exercises in all focus groups participants indicated that many local facilities serve more purposes than their primary function, of which the social function was mentioned most. Moreover, facilities seemed to have a symbolic meaning for the village. While some questions were aimed at investigating 'village identity' (see appendix a), we mostly found patterns of interpretation related to a mix of affective (PA), cognitive (PI) and behavioural (PD) place bonds to

facilities and the village as a whole. However, there are exceptions: in the first mapping exercise about places to take visitors, Harry_1 picked the football field because he plays there (PD), the café because it is "the core of the village" (PI) and the school because of personal memories (PA). For the second exercise participants were asked to map the facilities that had closed (see Fig. 4). Reminiscing together about the past, participants shared personal stories and expressed attachments to various facilities. We did not find major differences in the interpretation of place-change between different age groups or between native residents and newcomers. There was consensus that the supermarket and café were missed the most, because they were informal meeting places for all age groups and cultural or religious backgrounds. The school, the sports hall and the bakery were currently found to be important local facilities, because these are places where people meet and have a chat. In the survey, the same facilities were mentioned most as 'valuable places' because of their social function (Stutterheim et al., 2017). When mapping facilities that closed, participants automatically differentiated between the importance of certain facilities for themselves or for the community. In many responses, a distinction was made between a lack of individual dependence on the primary function of facilities, but rather a social and symbolic value for the community, as is illustrated by the following examples:

Janet_1: *"I don't really miss the facilities myself, but the 'bustle' in the village is gone."*
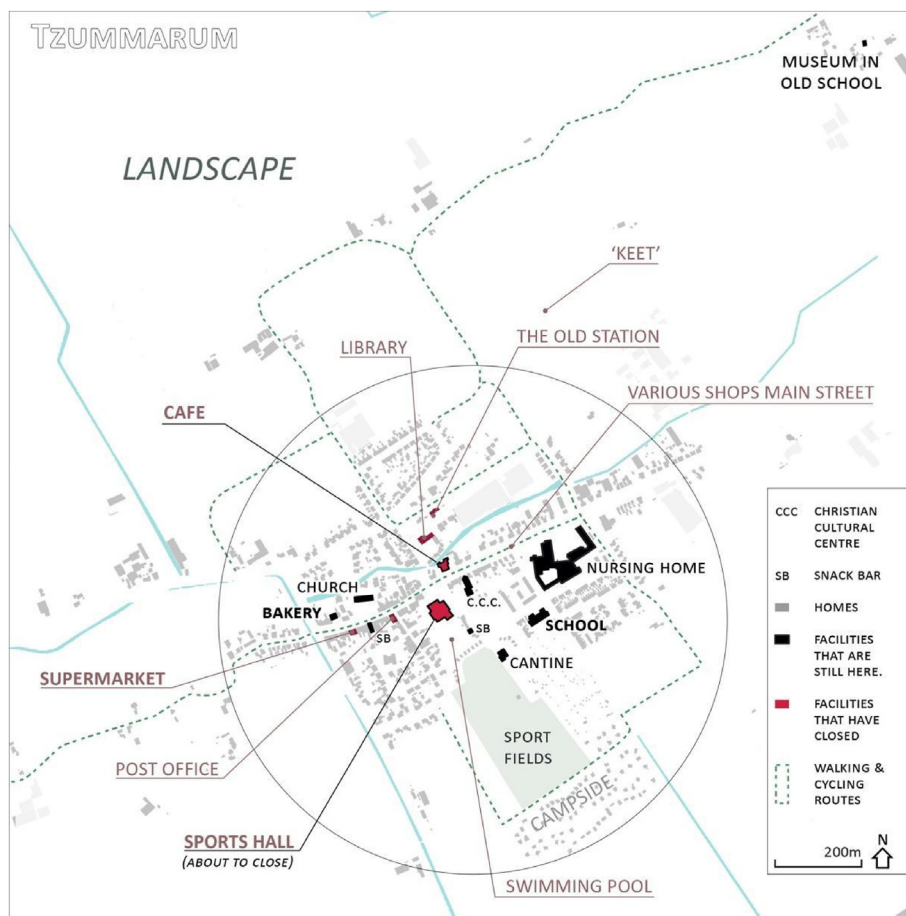
Fig. 4. Combined results of two mapping exercises from all three focus groups
<u>Inside the circle</u>: the facilities in Tzummarum at the time of this study (2017)
<u>Outside the circle</u>: the facilities that have closed or are about to close.

Sandra_2: *"For me personally, at the moment, I don't really miss those stores. A lot of Tzummarumers did not go to those stores, that's why they had to close."*

to which Bob_2 responded that you should not underestimate the "social aspect" those stores had. *"If that all disappears, you somewhat take the heart out of the village."*

Throughout the discussions, the importance of informal meeting places was mentioned, but some participants expressed the 'social value' of facilities for the community in a way that could be construed as social place dependence, because there is a 'need' for meeting places and a lack of alternatives. For instance, Bob_2 explains that facilities are important because the *"need for social contact is human",* and especially in a village community you need to *"have the opportunity to meet people and have a chat"*. The mapping exercises aided in uncovering that Tzummarum never had an official community centre, and only one specific group uses the Christian cultural centre. The sports hall and café were used for local events, and consequently the closure of both facilities was viewed as problematic by most participants since the sport-hall is currently the last 'neutral' communal meeting place. Another socially shared belief that emerged was that local facilities foster a sense of community. For instance, Lawrence_3 expressed how the school and sports-facilities *"connect and reconcile [people]"*. Often mentioned was how facilities matter for 'dorpsgevoel', which literally translates to 'village feeling', but it really means 'sense of village community' because it refers to a feeling of belonging, togetherness and commitment to fellow villagers.

For instance, what Marianne_1 responded to a discussion on facility-

decline and a decline of social interaction:

"This belongs to a 'village feeling', and that is what we are going to miss when

(facilities) disappear. I'm really upset about that."

John_3: *"Closure of facilities will come at the expense of the sense of togetherness in the community because these types of facilities are bonding."*

Because local facilities are believed to foster a 'sense of village community', facility-decline influenced how most participants perceived village identity. As illustrated by Frank_2: *"I think that the soul of a village is mainly formed by the fact that there are places where people can come together."* However, the identity of Tzummarum is not entirely defined by decline. In the focus groups (but also in the survey) people used natural amenities and terms as 'quiet', 'unique', and 'open landscape' to describe Tzummarum in a positive way, in addition to negative adverbs such as 'declining', 'sad' or 'dead'. In the first mapping exercise landscape-elements, such as the sea, dyke and walking routes, were the most mentioned places to take visitors. Some participants commented that this choice for natural amenities was made out of necessity, due to the lack of local facilities. While many participants did not feel that 'a peaceful village' could be an alternative identity, they would describe their village differently now that many facilities closed. When asked "What role facilities have for what kind of village Tzummarum is", participants immediately mentioned the closure of facilities. When talking about these places the discourse quickly became more negative, and participants expressed their concern and sadness

about facilities closing. Especially facilities like the cafe and super-market were missed because they created 'liveliness' in the village.

Mary_3: *"If there are [still] facilities then you notice that it is more lively in the street. You meet, you chat. Social life is a little bit attached to facilities."*

Henry_3: *"In the beginning when the* supermarket *was still open, there was always activity. People from the store would talk to each other. But it's really dead now. Really dead. "*

4.2. A shared sense of loss

A socially shared 'sense of loss' is evident by consistent use of ne-gative adverbs and discourse regarding facility-decline in all three focus groups. The closure of local facilities was consistently evaluated as a negative for the community, even if acces to an alternative service was not an issue for most people. The closure of the supermarket, café, and the upcoming closure of the sports hall were found to be most upsetting (see Fig. 4). It is striking that words like 'we miss' or 'we had' were often used when the closure of facilities was discussed. The use of these possessive phrases indicates a shared sense of loss, but also ingroup identification and a sense of 'collective ownership' (Frische et al., 2017). However, there were also participants that did not feel this sense of 'collective ownership'. When Josh_2 mentions that *"[…] they all talk about 'our' café"*. Sandra_2 replied: *"How he calls it, 'our' café, I don't feel it that way as a newcomer [to the village]."* Many participants dis-tinguished between what they miss personally, and what the commu-nity is lacking. The perception of loss is greatest for those facilities that are believed to have an important social function, and there was an overwhelming shared belief that the village misses a central meeting place, now that facilities that served this purpose closed.

John_3: *"We miss a supermarket, we miss a cafe, a real meeting place."*

Silas_1: *"[…] 6 years ago there was still a pub […] and now there is really nothing, no meeting place anymore. The sports hall was there. I came there regularly, but now we have nothing left."*

Joseph_1: *"Yes, that [a meeting place] is something the village is missing at the moment."*

Within the theme of 'loss' we can also distinguish several negative emotions that participants are exhibiting regarding the closure of fa-cilities, such as 'feeling upset', 'shock' and 'disappointment'. In the survey, emotions about the closure of the sports hall were mostly in-dignant (27%), sad (24%), angry (12%), resigned (12%) and 20% of respondents indicated they expected it (Stutterheim et al., 2017). Only 9% of respondents reacted neutral, and none were positive (Stutterheim et al., 2017). The focus groups provided more insight into these emo-tions. For instance, while collective possessive phrases were used re-garding facility-decline, emotions were all expressed using 'I' and not 'we'.

Beatrice_2: *"[…] well, that was a shock, when I heard that 'het Wapen' (cafe) was sold […]"*

In response to that Esther_2said:

"But I'm also still very upset about the swimming pool. There were times when I intentionally did not cycle (past it) through the village. I found it just too terrible."

Moreover, some participants were clearly more emotional than others, and in group three the participants (all born and raised in Tzummarum) did not want to discuss the scenario of more facilities closing. In group two (mixed ages and length of residence) the hy-pothetical closure of more facilities was met with moderate responses and resignation, but some participants expressed the fear that *"then it will become a ghost-town"* (Ida_2). In the survey, 87% of respondents

believed that the liveability of Tzummarum is declining due to the closure of facilities (Stutterheim et al., 2017). In the focus groups, most participants were positive about their village and describe it as a nice place to live, but the prevailing perception was still that facility-decline would lead to further decline of the liveability, as can be illustrated by:

John_3: "If more facilities close, yes, then it will become a ghost village.

Then the liveability/quality of life is greatly reduced."

Elsa_3: *"(since) we no longer have a supermarket,*

the liveability in the village is a bit gone."

4.3. Considering collective action for a community meeting place

There was variation in the belief that the village community is *able* to act (collective efficacy) against closure of different facilities. Many participants agreed that certain facilities, although missed, are unviable in a context of depopulation and increased mobility. Moreover, it was argued that newcomers to Tzummarum might be fine with the closure of facilities. As Henry_3 puts it: *"You don't miss what you never had. It's as simple as that."* However, the results of the survey do not support this statement (Stutterheim et al., 2017). In the focus groups native re-sidents and newcomers seemed equally engaged and most participants were aware that the community is considering to re-open the sports hall or recently closed café, as a village cooperation. When one participant suggested that both should remain open, other participants corrected her, and said that this would not be 'feasible'. The shops, bars and swimming pool are examples of private facilities that were often missed, but closure was met with resignation.

Josh_2: *"We used to have a pub, a sports hall and also a snack bar.*

That is just too much for such a [small] village"

Lawrence_3: *"Perhaps you still remember, if you walked through the Dorpstraat (the main street in the village) there were five bars, five ba-kery's … It's just not like that anymore and we will not get that back."*

Mary_3: *"Yes, I think we realize that [the swimming pool] is over and done. But, I think the Harnehal (sports hall) can perhaps still be saved."*

Accounts such as these are indicative of how some participants seemed to accept that times have changed. Nevertheless, there was consensus in all focus groups that the village needs a meeting place for different age groups and cultural backgrounds to foster a sense of community and solidarity in the community. In the survey 72% of the respondents indicated they miss a 'central meeting place' (Stutterheim et al., 2017). At the time of this study, the community was considering collective action to reopen the café or the sports hall for this purpose. However, there was also pragmatism and realism. As Abel_3 put it: *"If you want a facility to continue existing, people must use it."* The partici-pants discussed that the occupancy rate of the sports hall would have to be expanded, there would have to be a large pool of volunteers, and most importantly: the whole community should support the idea. When discussing a community response the phrase 'samen de schouders er onder' was used in all three groups, which literally translates as 'to-gether put our shoulders under it' and refers to the need to act together as a community. This sense of togetherness was thought to be important for the success of collective action. However, it is also the current sense of community and collective efficacy in this village that empowers these residents to consider action in the first place. The ability to act as a community was seen by participants as part of the 'village feeling', as is illustrated by:

John_3: "We need something that fits the village. Something that everyone supports

so that we can all put our shoulders under it (act together)"

Claudia_2: "people are willing to do something for the village"

John_3: "And that [acting together as a community] ultimately makes a village special.

If you can create that together, that makes the village nice to live in."

5. Discussion

This study finds that the closure of local facilities in the Dutch village Tzummarum was predominantly evaluated as a negative event due to the disruption of place bonds and the social and symbolic meaning of many facilities for the village community. There was a shared sense of loss regarding facility-decline. However, feelings of loss do not necessarily lead to collective action, and coping responses vary for different facilities. While the closure of several facilities is lamented but accepted, the community was investigating if the upcoming closure of the sports hall could be prevented. This study does not investigate how residents became aware of place change (stage 1 in Fig. 2) nor did we focus on actual communal responses (stage 5 in Fig. 2). However, the themes that emerged from the focus group discussions relate to stage two, three and four of our theoretical framework (Fig. 2). We will briefly discuss each theme in relation to these stages in the framework's cyclical socio-psychological process that precedes a community response to place-change.

5.1. Stage 2, interpretation, related to the social and symbolic meaning of facilities

The results of this study show that the interpretation-stage of place-change is contextual, since some local facilities were deemed more important than others due to their social and symbolical meaning (theme I.). Many facilities fulfilled primary, secondary and social functions because this village lacks a town hall. However, the social function of the supermarket, café and sports hall was viewed as very important, and these closures were interpreted as detrimental for the village. This supports previous findings that local facilities in rural areas tend to serve more purposes, as they are places where people meet and interact (Buffel et al., 2014; Christiaanse & Haartsen, 2017). The context (regional process) of population decline also influences this interpretation, since most participants shared the belief that in the face of depopulation it is even more important to have a 'central meeting place' in the village, to foster a sense of community. In this way participants differentiated between the value of certain facilities for themselves and for the community.

5.2. Stage 3, evaluation, related to a shared sense of loss due to facility-decline

In the evaluation-stage of place-change, closure of local facilities was evaluated as a negative event, and we distinguish shared sense of loss (theme II.) for facilities with social and symbolic value for the community (such as the supermarket and café). For these facilities there was a sense of 'collective ownership', as indicated by phrases like 'we have' or 'we miss'. These findings are in line with previous studies that mention the use of possessive phrases for landscape (Bailey et al., 2016), community (Pretty et al., 2003), facilities and services (Buffel et al., 2014), and general experiences of loss relating to facility-decline (Elshof & Bailey, 2015). In the case of Tzummarum, facility-decline lead to a perceived 'loss of liveliness', which relates to village identity. The village was described as 'dormant' or some even say 'dead'. However, feelings of loss do not necessarily lead to collective action or other forms of community opposition to place-change. This is in line with previous findings that show that rural decline can be perceived as a serious loss or threat, but still accepted as inevitable (Cook et al., 2007;

Elshof & Bailey, 2015; Milbourne & Kitchen, 2014).

5.3. Stage 4, coping, related to collective action for a community meeting place

How a community *intends* to respond to facility-decline (theme III.) relates to the coping-stage in the theoretical framework. The community's intended coping responses vary for different facilities based on their value for the community, and levels of collective efficacy. In Tzummarum, some closures were accepted as inevitable, but for the sports hall or café residents were willing to consider protective action and 'pull together', because they were believed to foster a sense of community. Our research also confirms findings by Cohen-Chen and Van Zomeren (2018), in that collective action is only considered when there is 'hope' for community support and economic feasibility. The cyclical nature of the model is supported by the empirical evidence, for instance because some participants indicated that acting together is fuelled by a sense of community, but the current social interactions also strengthen this sense of community. This supports the premise that various aspects of a community's social capital influence each other and play a part in how a community copes with place-change. Moreover, this stage is also contextual, since coping is influenced by individual, cultural and communal characteristics.

6. Conclusion

This paper presents a theoretical framework (Fig. 2) that can be applied to different contexts to study the socio-psychological process of how a village community makes sense of place-change. It is suitable to study attitudes towards place-change and the disruption of affective, cognitive and behavioural place bonds on various geographical scales, in a holistic way. Two main contributions are made compared to the theoretical models for responses to place-change by Devine-Wright (2009) and Mihaylov and Perkins (2014). The first being the subdivision of Mihaylov and Perkins' interpretative processes, so that it coincides with the stages of 'interpretation' (stage 2) and 'coping' (stage 4) in Devine-Wright's model. This combination increases the explanatory power of the framework, because it illustrates Devine-Wright's subsequent stages of psychological response, as well as the various community-based concepts that are introduced by Mihaylov and Perkins (2014). The second contribution is that our framework makes it explicit that community responses to place change are to be viewed as a *cyclical* socio-psychological process. While the interpretive processes are split into subsequent stages, there is a constant re-evaluation of place change based on (1) place bonds that are not stable over time, (2) place based social-interactions and the different aspects of a community's social capital, (3) contextual factors such as cultural, individual and community characteristics, norms and beliefs, as well as (4) various global to local processes. Accordingly, the whole process of how a community copes with place change is in constant flux, not unlike Di Masso et al.'s (2019)'flow in fixities'. However, where many studies (e.g., Di Masso et al., 2019) focus on the initial disruption of place bonds, or on the final community responses (e.g. Carrus et al., 2014; Gifford & Nilsson, 2014), this model can help to understand the process in-between.

The theoretical model in Fig. 2 can be applied to different contexts and different forms of place-change, however, the empirical outcomes of this study are context-specific. Nevertheless, the findings of this study offer insight into how a community experiences the closure of local facilities. These insights can inform policy responses in rural areas and inspire governance processes that can reduce place disruption (Clarke et al., 2018). This study shows that facility-decline is perceived as a threat to the community, not because of accessibility-issues but because the closure of local facilities is believed to negatively affect the sense of community and liveliness in the village. Local facilities can form a 'web of meaningful public places' in a community (Manzo, 2003). Nevertheless, collective action is only considered for those local

facilities that foster a sense of community due to their social and symbolic meaning, *if* there is enough collective efficacy to support a community response. The closure of other facilities is deemed unavoidable in the context of depopulation, even though there is a shared sense of loss. Many studies show how place-change can result in a loss of 'place', 'self' or 'community' (e.g. Anguelovski, 2013; Dixon & Durrheim, 2000), but perceived control over the living environment can mitigate feelings of grief for residents (Buffel et al., 2014). This could be an incentive to support participatory planning methods for those facilities that are believed to strengthen the sense of community and empower communities to deal with place-change.

CRediT authorship contribution statement

Suzan Christiaanse: Conceptualization, Methodology, Formal analysis, Writing - original draft, Writing - review & editing, Visualization. **Tialda Haartsen:** Supervision, Writing - review & editing.

Appendix A. discussion guide focus groups

Selection and invitation of participants

Participants were approached by phone and email after they expressed their interest to participate in the survey. For each of the three focus groups a mix of participants was made according to age, gender and length of residence. The general purpose of the meeting, and the fact that the discussion would be recorded for scientific purposes was explained in the initial invitation, and re-iterated on the day.

Structure of the discussion

The three focus groups took place in the canteen of the sports fields. Participants took a seat around a large table where a map of the village was placed in the middle. Each focus group discussion lasted approximately 3 h, and was structured around reflection on the past, present and future of the village. The moderator allowed for some flow and flexibility in the discussion, so follow-up questions were tailored to the moment. However, this discussion guide shows the questions that were asked in all groups. When certain places were mentioned, the moderator asked the participants to indicate this on the map with a marker. Evaluative mapping was used to map areas or places with (cognitive, affective and conative) meaning using questions that reflect emotion, memories and behaviour such as: 'where would you take visitors', 'which places are meaningful to you?' and 'what facilities are missed the most (by the community)?'. In contrast to other methods for evaluative mapping (Brown et al., 2015) the meanings were not pre-figured, but free for participants to describe.

Introduction

Each focus group was started with a word of welcome and introduction of the researcher (primary author), what to expect of the next 2 h, such as the use of the map and coffee break. The participants were then officially asked if they **consented** to being recorded. It was explained that the videos would only be used to transcribe the discussions, and that names would be altered for publication. Lastly, each participant was asked to introduce themselves to the group.

Round 1: Tzummarum now

In the first round of the focus group, the present status of the village was discussed. The first question was for each participant *to* **'mark three places on the map where you would take visitors, and explain your choice'**. This question was meant to map what places people found important and positively contributed to the village identity, without

directly steering towards the subject of facilities. We made our way around the table so each participant could have their say and mark 3 places on the map. The individual assignment using a map was also meant to break the ice, and give each participant the space to voice their opinion without being influenced by the group. People were then asked to remember their description of the village in the survey (question 1 in the survey was **'what kind of village is Tzummarum'**), and if they mentioned their places to take visitors in this description. This was meant to indicate which places are important in shaping village identity. But most people actually did not remember their description. After this a more free flowing discussion usually took place, and the moderator would ask to reflect on the points indicated on the map with questions such as: **'Are some of these points facilities? And why were they (not) chosen?'**

Round 2: Tzummarum of the past

The second round focused on the past: which facilities had closed, how do people feel about that and what is the impact on the village community. Participants were asked, **as a group, to 'mark all the facilities that had closed on the same map'**. The group was then asked to agree **'which three facilities are missed the most/were important, and mark them in red'**. Follow up questions included 'why' these were missed the most. The moderator then asked the group **'if the closure of facilities changed what kind of village Tzummarum is'** and if yes: how. Follow up questions differed slightly per focus group but included: *'Do older/younger/newcomers deal differently with closure of facilities?'*

Round 3: Tzummarum of the future

In the third round we discussed the future: how do people and the community cope with the closure of facilities. A question that was asked in every group was **'what would it mean for the village if more facilities would close?'** although sometimes it was asked more specifically, like in group 1: *'what kind of village would Tzummarum be if the bakery, school and nursing home also closed?'*. Probing questions were used to follow up on the perceived effects of ongoing facility-closures. Finally the group was asked about their **'reaction to the upcoming closure of the Harnehal (the sports hall)'**, and if they would consider taking any actions themselves to try to keep it open. This question usually sparked a group discussion on what the community should, or should not do.

In all three groups the moderator also asked if positive attributes that were mentioned in the description of Tzummarum, like nature and quietness, could be an **'alternative identity'** for the village when facilities close. Sometimes this was asked in round 2, and sometimes in round 3.

<u>NOTE:</u> Following the procedure for ethical clearance at the Faculty of Spatial Sciences, a self-assessment through an ethics check list was done prior to data-collection. More information can be found here. The researchers are subjected to The Netherlands Code of Conduct for Scientific Practice.

Appendix B. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jenvp.2020.101432.

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