Self-Efficacy and Collective Efficacy as determinants of participation in Collective Action

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Abstract

Collective action is behaviour conducted by a group member for the benefit of the group as a whole. It is a key element in combatting challenges which are collective in nature, such as environmental threats. Previous research established a number of theoretical models of participation in collective action based around effects of social identity and its measure in the form of group identification. We investigate these models and the discrepancies within them, while testing an alternative model assuming self-efficacy and collective efficacy as moderators. Our correlational study surveys a sample of 124 participants from Oosterparkwjik in Groningen, Netherlands. We find no evidence to support the hypothesised effects of self-efficacy and collective efficacy as moderators, but we confirm the importance of these variables as significant predictors of participation in collective action.

Keywords: climate, sustainability, collective action, community, self-efficacy, collective efficacy, group identification, participation

Self-Efficacy and Collective Efficacy as Psychological Determinants of participation in Collective Action.

The effects of human influence on climate, biodiversity and stability of ecosystems can already be felt today and will continue to accumulate (Gissi et al., 2021; Kannan et al., 2009). These effects have a direct negative impact on human health and habitability in large parts of the world (Horton et al., 2021; McMichael et al., 2006; Pan et al., 2010). Change is inevitable, and no single individual can enact or adapt to this change by themselves.

Solutions focusing purely on individual approaches, although partially effective, are lacking in producing sufficient impact (Peattie et al., 2009), likely because models of individual behaviour not directly accounting for complexity of social and economic dynamics involved in environmental issues, are an insufficient base for combatting problems that are collective in nature (Bamberg et al., 2015). The alternative viewpoint consists of seeing environmental sustainability as a collective problem, rather than a problem related to individuals and their choice as conceptualised by ABC based behavioural models (Shove, 2010). In most of ABC models, people's attitudes (A) are assumed to motivate choices (C) of behaviour (B) on an individual level. (Shove, 2010) Policymakers have largely assumed this ABC based perspective and policy has been designed purely in terms of individual behaviour, as determined by an individually made choice. Quoting Shove, “transitions toward sustainability do not depend on policymakers persuading individuals to make sacrifices … Instead, relevant societal innovation is that in which contemporary rules of the game are eroded … These are not processes over which any one set of actors has control” (Shove, 2010, p. 1278) Additionally to individually motivated actions of isolated individuals, Collective Action (CA) such as community-led initiatives must be fostered in order to solve problems related to environmental threats (Ardoin et al., 2023).

As such, the psychological determinants of participation in collective sustainability action are of great interest. Specifically, the concepts of group identification and efficacy have played a key role in multiple models of participation intention (Bamberg, et al., 2015). Discrepancies about directionality of causation between efficacy and group identification exist between different models (Bamberg et al., 2015). This article aims to further investigate and clarify the relationship between efficacy, group identification and the intention to participate in collective action. Better understanding of the relationships between these psychological predictors would allow for involving individuals more easily in collective actions.

Literature review

Wright et al. state, that "A group member engages in collective action anytime that he or she is acting as a representative of the group and the action is directed at improving the condition of the entire group."(1990, p. 995) It follows, that if one is to participate in said action, identification with said group is a prerequisite. An almost identical definition is used by Tajfel et al. (1978) and Van Zomeren et al. (2009). CA is not necessarily only aimed at improving conditions of the said collective which directly engages in action, but also that of a larger group with which one identifies (Van Zomeren et al., 2009). Within the scope of this conceptualisation, the reasons for engaging in CA are at least partially altruistic, undertaken for the sake of the entity of a larger group. Models describing determinants of CA such as the Dual-pathway model of CA (Stürmer, 2004), Social identity model of CA (SIMCA) (Van Zomeren et al., 2008) and Encapsulated model of social identity in CA (EMSICA) (Thomas et al., 2012) were developed in the context of social inequality and protest, but Bamberg et al. (2015) show that these models are equally predictive in the context of collective climate action.

In each one of these models, the key, most strongly correlated predictor of CA participation intention is social identity (Bamberg, et al., 2015). Much previous research agrees on the importance of social identity in predicting CA (Van Zomeren et al., 2009). The strength of the relation of an individual's identity to the identity of a specific group/collective, and thus the extent to which said person identifies with a specific group, is often operationalised by slightly different concepts. For example, it can be labelled as social identification (Thomas et al., 2012), collective identification (Stürmer et al., 2004) ingroup identification (Cameron, 2004) or intragroup identification (Hinke et al. 1989). Multiple labels are sometimes even used for the same measured concept within published work of a single author or group of authors (Cameron, 2004; Bamberg et al., 2015; Van Zomeren et al.,

2009). As such, these concepts will be considered to be synonymous for the purposes of this paper, although further comparative investigation into these concepts and their measures is warranted in order to determine with more certainty, whether their interchangeable use in theorizing and model comparison is valid. Nevertheless, group identification (GI) is likely a core predictor of CA.

Another important predictor of CA figuring in both SIMCA (Van Zomeren et al., 2008) and EMSICA (Thomas et al., 2012) is collective efficacy (CE) (Bamberg et al., 2015). CE also figures in other models closely related to CA such as SIMPEA (Fritsche et al., 2018), while concepts closely related to collective efficacy, such as self-efficacy (SE), and perceived behavioural control are a part of multiple models of CA (Oliver, 1993; Stürmer, 2004). Albert Bandura (1995) regards CE in policy and public health approaches as the perceived efficacy of the collective ability to cooperate, plan and execute actions delivering on common goals. Models investigated by Bamberg et al. (2015) have followed this definition of CE and so will this article.

In the SIMCA, CE is conceptualised as a mediator of the effect of social identity on CA. The SIMCA model is somewhat paradoxical, as the authors themselves remark (Van Zomeren et al., 2013). If an individual believes their group to already have great efficacy in achieving goals, this should rationally present a reason not to participate, since little personal benefit is expected as an outcome of their individual participation in the CA (Van Zomeren et al., 2013). This idea is supported by Olson (1968), since rational actors should act as free riders under such circumstances. Nevertheless, CE seems to be positively correlated with participation. Van Zomeren et al. try to remedy the issue by introducing the concept of participative efficacy, defined as, “the belief that one can make a difference through one’s own contribution to the collective efforts aimed at achieving group goals.” (2013, p. 619)

Van Zomeren et al. (2013) argue that if participative efficacy is high, rational actors don't free ride as readily despite high levels of CE.

Collective efficacy as a moderator

Bamberg et al. (2015) mention an alternative, simple explanation of this free rider paradox. Individuals are more likely to identify with groups which are believed to have the efficacy to deliver on common goals. Common goals are a well established predictor of GI (Zhang et al., 2012), and according to the definition given by Bandura (1995), collective efficacy is the perceived ability of the group to deliver on said common goals. This would be more in line with the causal direction proposed in EMSICA where CE is a predictor of GI, the other way around compared to SIMCA (Thomas et al., 2012) This idea is also supported by experimental results (Van Zomeren et al., 2010). It potentially follows, that the effect of common goals on group identification is moderated by beliefs of CE specific to those goals.

Hypothesis 1: Collective efficacy beliefs moderate the effect of common goals on group identification.

Self-efficacy as a moderator

Bandura states that "Perceived self-efficacy is concerned with people's beliefs in their ability to produce given attainments" (Bandura, 2006). This conceptualisation of efficacy is highly domain specific. Bandura gives an example of how a business executive may have a high sense of organisational efficacy, but a low sense of parenting efficacy (2006). This idea of specificity and generality can be taken further. Hanss et al. (2010) remark that the level of generality on which efficacy is to be measured must be comparable to the generality of the action it relates to. One cannot compare one's general sense of ability to break through a concrete wall, to one's specific sense of their ability to break through a concrete wall given a pneumatic hammer, and an ample amount of time. One's general sense of ability will likewise not necessarily predict their willingness to engage in a specific action very well, and

even less in regard to a specific collective action. Similarly, if comparing CE and SE, they must be measured on the same level of specificity, the scope of a specific CA. The frame of reference is key.

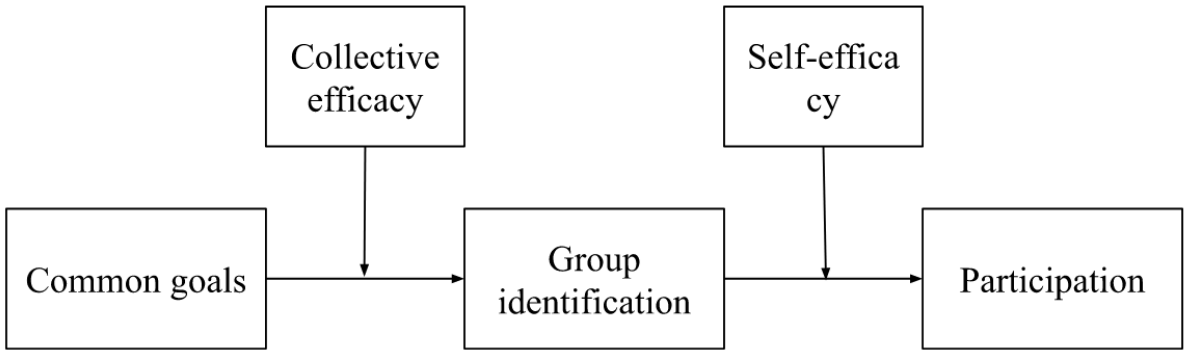
Following this rationale, it could be argued that the concept of participative efficacy as defined by Van Zomeren et al. (2013) is purely a form of self-efficacy specific to a collective action and its goal. If this is considered to be true, it follows that if the level of self-efficacy specific to collective action is high, actors don't free ride even if collective efficacy specific to collective action is high.

If this is the case, and if CE beliefs indeed moderate the effect of common goals on GI as stated in H1, it follows that the effect of GI on participation would be moderated by SE.

Hypothesis 2: Self-efficacy beliefs moderate the effect of group identification on participation in collective action.

Figure 1

Model of participation in collective action



This model has the potential to unify both possible explanations to the free rider paradox offered by Bamberg et al. (2015) in one framework. CE precludes GI **and**, participative efficacy in the form of SE also determines whether an actor free rides or decides to participate in a CA.

Method

Participants

Over 3 weeks of data collection, a total of 124 participants responded to our questionnaire. Of those, 116 responded to all items relevant to the hypotheses. Ten participants not passing the attention check have been excluded, which leaves a total of 96 responses valid for the analysis. No outliers were excluded from the analysis of variables of interest, as no influential outliers were identified. All the participants were residents of the Oosterparkwjik in Groningen, Netherlands.

The neighbourhood of Oosterparkwjik was chosen for data collection due to the presence of private gardens, which was a relevant criterium of the sustainability initiative used as an example in the questionnaire, and its relative diversity in terms of socio-demographics. Individuals of various ages, financial means and ethnicity reside in the neighbourhood. No demographic measures were included in the questionnaire due to lack of relevance to the hypotheses. Only legal adults were asked to participate.

Design and procedure

Our research design was purely correlational and consisted of an online questionnaire. Participants were approached in person at their homes and asked to fill the questionnaire on the spot or at their own leisure. We have used an existing, well-known and established initiative to contextualize our measure of collective action. The initiative, NK Tegelwippen is an annual national Dutch competition between municipalities, on the amount of removed tiles from private gardens and their replacement with greenery. The aim of the initiative is to combat high ambient temperatures in urban areas caused by accumulation of heat in garden tiles during summer months, to increase water retention and to reduce the risk of flooding by introducing greenery and increase biodiversity in the urban environment.

Measures were selected for variables of interest and combined in a Qualtrics questionnaire. This questionnaire can be found in the Appendix A. After reading basic information about the research itself and consenting to participation, individuals were introduced to a short summary of the example initiative. Measures of variables, which followed, were ordered in such a way that they would conceptually relate to one another. We did not have a reason to expect any order effects. The selective sample of participants (Oosterparkwijk) was approached in person and asked to fill in an online questionnaire, either on the spot or at their own leisure. Participants chose whether to fill in an English or a Dutch version of the questionnaire. This research was purely correlational and undertaken as part of a bachelor thesis project. Participation was anonymous, voluntary and consent was given, no incentives were used.

Measures

We used self created measures designed within our research group.

Participation intention

The intention to participate was measured by 4 items on a standard 7 point Likert scale. The Cronbach's alpha of this measure was 0.873. Participation intention is a good measure of estimating real participation (Bamberg et al., 2015). (e.g. Based on this initiative, to what extent would you be likely to participate in this initiative).

Group identification

The extent of group identification was measured using 4 items on a standard 7 point Likert scale. This measure was inspired by and items were adapted from a measure of entitativity developed by Blanchard et al. (2020). Our measure also included a pure self report item of identification with the neighbourhood (I identify with the people in my neighbourhood). The Cronbach's alpha of this measure was 0.75.

Common goals

The extent to which goals are perceived to be shared with neighbours was measured using 2 items on a standard 7 point Likert scale. This measure was also an adaptation of questions used in an entitativity measure developed by Blanchard et al. (2020) related to common goals. The Cronbach's alpha of this measure was 0.898 (e.g. We want to achieve the same goals).

Self-efficacy

SE was measured using 2 items on a standard 7 point Likert scale. Used items were inspired by notions of Hanss et al. (2010) on two distinct aspects of measuring self-efficacy and guide on the development of self-efficacy scales by Bandura (2006). Hans et al. (2010) argue, that both perceived ability to participate and the perceived ability to deliver on desired goals by said participation, need to be taken into account when measuring self-efficacy. The Cronbach's alpha of this measure was .483 which is very low. (e.g. **I** have the ability to participate in this initiative effectively).

Collective efficacy

CE was also measured using 2 items on a standard 7 point Likert scale and was likewise inspired by Hanss et al. (2010) and Bandura (1995, 2006). The Cronbach's alpha of this measure was 0.747 (The participation of **our neighbourhood** will help accomplish the goals of this initiative).

Attention check

The questionnaire included an attention check, asking participants to select the Strongly agree option. Attention checks are useful for ensuring good quality of data by identifying participants who are not attending the questions accurately enough. Participants who missed the check were excluded from data analysis.

More measures were included in the questionnaire, but these were not relevant to the scope of the hypotheses addressed in this article. They can be found in the Appendix A. Results were analysed in JASP.

Results

Our aim was to investigate a model of participation in collective action with group identification as a core predictor. However, in our sample, Group identification (GI) was not significantly correlated with participation intention (PI) ($r = .07$, $p = .512$). This contradicts results of previous research on models of participation in collective action (Bamberg et al., 2015; Fritsche et al., 2018; Stürmer et al., 2004; Van Zomeren et al., 2008). GI was also non-significant as a predictor of PI in the Classical Process Model, which was used to examine moderation and mediation effects ($r = .052$ $p = .609$). Why this may be the case will be elaborated on in the discussion.

Table 1

Descriptive statistics

	M	SD	Shapiro-Wilk p	PI WIF
Participation Intention	4.354	1.303	.212	-
Self-efficacy	5.188	1.069	< **.001**	1.320
Collective Efficacy	5.115	1.137	< **.001**	1.520
Group Identification	4.392	1.141	***.029***	1.406
Common Goals	3.985	1.113	< **.001**	1.291

Note. All variables were scored on a 7 point Likert scale

Assumptions and descriptive statistics

Linear regression was used to get simple correlation coefficients and Classical Process Model (CPM) analysis in order to investigate mediation and moderation effects. CPM was bootstrapped at 1000 replications, with use of bias-corrected percentile. Visual inspection of plotted relationships between predictors and the dependent variables showed

linear relationships. The residuals of dependent variables of GI and PI show homoscadisticity. The Variance Inflation Factor of all variables was well below the cut-off and thus there is likely no significant multicollinearity between the variables (see Table 1).

However, the assumption of normality has been violated for all variables except for PI as measured by the Shapiro-Wilk test. The distribution of GI did not significantly differ from a normal distribution at a $p = .001$ cut-off, but at a $p = .05$ it also could not be considered normal ($p = .029$).

The descriptive statistics can be seen in Table 1. All means of variables of interest were reasonably high. The SD of variables was very similar. The mean duration of a response after excluding one outlier was 12.49 minutes, which agreed with our expectations.

Hypothesis 1

In our Hypothesis 1, we postulate collective efficacy as a moderator for the effect of common goals on group identification (GI). We did not find evidence for such an effect. Common goals (CG) were found to be significantly correlated with GI in our sample ($r = .482$, $p < .001$), and CG were also a significant predictor of GI as analysed by CPM ($r = .43$, $p < .001$). However, collective efficacy (CE) was not a significant moderator of the effect CG had on GI according to CPM ($r = -.032$, $p = .622$). Moreover, CE efficacy was not a significant predictor GI as evaluated by CPM ($r = .073$, $p = .445$).

Hypothesis 2

In the Hypothesis 2, we expected self-efficacy (SE) to moderate the effect of GI on participation intention (PI). SE was a significant moderator for the effect of GI on PI only at $p < .05$ ($r = -.19$, $p = .025$), however since GI did not predict PI in our sample, this result cannot be interpreted in any meaningful way.

Table 2

Pearson's Correlations

Variables		PI	SE	CE	GI	CG
PI	Pearson's r	-	-	-	-	-
	p-value	-	-	-	-	-
SE	Pearson's r	**.410**	-	-	-	-
	p-value	**< .001**	-	-	-	-
CE	Pearson's r	**.335**	**.469**	-	-	-
	p-value	**< .001**	**< .001**	-	-	-
GI	Pearson's r	.146	.010	***.240***	-	-
	p-value	.151	.920	***.019***	-	-
CG	Pearson's r	.157	.036	**.354**	**.482**	-
	p-value	.123	0.727	**< .001**	**< .001**	-

Correlates of PI

As mentioned earlier, GI was not significantly correlated to PI ($r = .07$, $p = .512$). It was also not a significant predictor of PI in the CPM ($r = .052$, $p = .609$). As found by Bamberg et al. (2015) in previous research, CE was significantly correlated to PI ($r = .335$, $p < .001$), but this relationship became no longer significant once SE was added in linear regression as a correlate of PI ($r = .183$, $p = .087$). Interestingly, SE was a significant moderator of the effect CE had on PI ($r = .345$, $p = .007$). SE itself was significantly correlated to PI in simple linear regression ($r = .410$, $p < .001$) and in CPM ($r = .406$, $p < .001$).

Table 3

Classical Process Model path coefficients, moderation

Continuous Predictors		Dependant	Estimates	Std. Error	Z-value	P-value
CG	→	GI	**.430**	**.096**	**4.469**	**< .001**
GE	→	GI	.073	.096	.764	.445
CG:GE	→	GI	-.032	.062	-.521	.603
CG	→	PI	.083	.101	.819	.413
GI	→	PI	.052	.102	.512	.609
SE	→	PI	**.406**	**.090**	**4.515**	**< .001**
GI:SE	→	PI	***-.190***	***.085***	***-2.242***	***.025***

Note. Standard errors and test statistics are based on standardised estimates.

Table 4

Classical Process Model path coefficients, mediation

				Estimate	Std. Error	Z-value	P-value
CE	→	PI		.414	.235	1.760	.078
CE	→	SE	→ PI	***.345***	***.129***	***2.680***	***.007***

Note. Standard errors and test statistics are based on standardised estimates.

Discussion

We investigated self-efficacy and collective efficacy as moderators in a model of collective action (CA). Based on previous causal findings (Bamberg et al., 2015; Zhang et al., 2010), common goals were assumed as a predictor of identification, and identification as a predictor of participation intention in collective action. Common goals were found to be correlated with identification, but despite the significance of identification as a predictor of participation in previous research (Bamberg et al., 2015; Fritsche et al., 2018; Stürmer et al., 2004; Van Zomeren et al., 2008), we did not find this effect in our sample. This begs the question of what could be the cause for the lack of a significant relationship in our sample despite the evidence of previous research.

A likely explanation is that the scope of GI measured in our survey differed from the ones used in past research. Our predictor was related to identification with the local community (neighbourhood), which would participate in the initiative and benefit from it, whereas in previous research, measured GI was related to the community which was directly conceptually connected to the said initiative (e.g. identifying with a specific environmental movement group and participation in said group) (Bamberg et al., 2015). This highlights the need for a clear conceptual overlap between the group and the initiative if the identification with the group is to be predictive of participation. Identification with the local community, that would potentially benefit from one's participation in a collective action, not conceptually related to the specific CA, does not seem to be a significant factor of one's participation. This highlights the possibility of GI as a largely altruistic motive for participation.

Van Zomeren et al. (2008) postulate a similar distinction, but more specific in terms of focusing purely on political action. Politicized identity predicted the extent to which participants were willing to join in collective actions related to social movements, but non-politicized did not. In the case of environmental collective action, identification with

environmental movements would be likely the appropriate, relevant type of identification. Similarly to how self-efficacy, collective efficacy and participation need to be related to one another on the same level of domain specificity, so does the measure of one's identification in order to be predictive. This theoretical distinction seems promising, but would need to be tested in further research.

Hypothesis 1 and 2

Bamberg et al. (2015) theorize, that individuals are more likely to identify with groups which are believed to have the efficacy to deliver on common goals. In the light of this explanation to why actors choose not to freeride despite high levels of collective efficacy, we theorized, that since common goals have been previously shown to be causally related to group identification (Zhang et al., 2012), collective efficacy is a likely moderator of this relationship. However, we found evidence against our Hypothesis 1. Common goals were a significant predictor of identification, but collective efficacy did not moderate this relationship. Interestingly, inclusion of common goals in our model made collective efficacy no longer significant as a predictor of identification.

In the Hypothesis 2, we proposed self-efficacy as a moderator of the effect identification had on participation. The main purpose was to explore an alternative explanation of the free-rider paradox. Due to the lack of a significant relationship between identification and participation in our sample, the moderation effect we found cannot be interpreted in any meaningful way. We lack the sufficient evidence to properly test this hypothesis and our envisioned combined model fully. It would be of interest to investigate the relationship with an identification measure of a different scope and test the Hypothesis 2 again. There is a possibility of the measure we chose to be similarly impacting our results in regards to Hypothesis 1.

Methodological limitations

Firstly, our sample size was very small. N = 96 after removal of incomplete responses and participants missing the attention check. This is insufficient for generalising our results to a larger population and possibly also detecting relationships present there. A much larger sample size would be preferable. This was likely also the cause of the lack of a normal distribution of variables as evaluated by Shapiro-Wilk test. Visually, our data set seemed normal, but it still significantly differed from a normal distribution, except for the variable of PI.

Secondly, our measures were inspired by previously validated scales, but decidedly self-made. This gives them limited validity, thus our results are likewise of limited interpretability. The most problematic was our measure of self-efficacy, which only had Cronbach Alpha of .483.

Theoretical and practical implications

Both self and collective efficacy were strong, significant and positive correlates of the PI in our sample. However, if both CE and SE are plotted as predictors of participation intention in a linear regression simultaneously, CE becomes no longer significant. This is exactly in line with the findings of a study by Bamberg et al., in which inclusion of participation efficacy made CE no longer significant (2015). Our findings support the idea of no likely direct effect of CE on PI, and are in line with a large scale study (n = 22106) by Carbone et al. (2018) which found no direct causal effect of CE (or any of its dimensions) on participation in CA.

CE likely does not affect PI in CA directly. We theorised it to be a moderator of the relationship between CG and GI, but it did not seem to have such an effect in our dataset. Interestingly, we found evidence for CE being mediated by SE. In the CPM analysis, SE was a significant mediator of the effect CE had on PI in our sample. This effect seems promising,

but causality of this direction would need to be tested in future research. Further investigation of the relationship between CE and SE is warranted, as it would not only help clarify how they interact in terms of participation in CA, but also help us to conceptualize the variables in relation to each other.

Better understanding of the mechanisms behind participation in CA would allow for more effective and efficient ways of facilitating change. Interventions can be designed in ways that make use of these mechanisms. Groups most likely to participate can be targeted with appropriate information, and hurdles barring individuals from engagement (such as low perceived SE) can be overcome. Available resources are always limited, and their use needs to be guided by empirically supported theories. Environmental policy has a tendency to be guided by a small subset of theories which become entrenched ideological positions, and remain unchanged despite their shortcomings (Shove, 2010). Approaches not empirically proven to achieve desirable outcomes are a waste of available resources. Understanding CA is key to combatting environmental threats, and our results add to the body of literature clarifying the relationships between the variables relevant to participation in CA. The relationships between predictors of participation seem to be more complex than originally envisioned, the large number of theoretical models which seem to be similarly predictive is emblematic of this complexity (Bamberg et al., 2015; Fritsche et al., 2018; Stürmer et al., 2004; Thomas et al., 2012; Van Zomeren et al., 2008).

Future directions

Many research groups, similarly to ours, make use of self created or adopted measures which have never been assessed in terms of external validity or examined in relation to one another (Bamberg et al., 2015; Stürmer et al., 2004; Thomas et al., 2012; Van Zomeren et al., 2008). This applies even to large scale surveys such as one by Carbone et al. (2018) (n = 22106). Although these measures theoretically seem to capture the variables they pertain to

measure, they are being utilised based on an untested assumption. Results of research with such methodological basis cannot be generalised to populations at large, or theoretically built upon reliably. This issue needs to be addressed in the future if theory is to guide practice.

Conclusion

Collective Efficacy is most likely not a direct predictor of participation intention, but it probably has an indirect impact. Self-efficacy is likely a strong predictor, directly affecting participation intention and possibly mediating the effect of collective efficacy. Identification with groups not conceptually related to an intervention is not predictive of participation in said interventions. This is despite the involvement and possible benefit to the group as an outcome of the intervention.

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Appendix A

NK Tegelwippen 2024

The NK Tegelwippen is a national initiative dedicated to creating greener neighbourhoods by encouraging the removal of tiles from household gardens. Aimed at making the Netherlands more climate-proof. This is because greener gardens are more effective at reducing the risks of both flooding and heat waves, due to higher rates of water retention and cooling effects. Since 2021 municipalities have competed annually on the amount of tiles removed from the gardens. Alongside your neighbours, you can join the initiative by replacing your tiles with greenery such as grass, plants and trees. Each tile you remove will be added to the 'tilecounter' of your municipality. Your participation will not only help your municipality compete, it will also help combat the local risks caused by climate change.

More useful information on how to participate and tips for greening can be found on their website. (Provided at the end of the questionnaire)

Based on this initiative, to what extent would you be likely to...

	Extremely unlikely (1)	Moderately unlikely (2)	Slightly unlikely (3)	Neither likely nor unlikely (4)	Slightly likely (5)	Moderately likely (6)	Extremely likely (7)
...participate in this initiative (1)	o	o	o	o	o	o	o
...enrol for this initiative (2)	o	o	o	o	o	o	o

...seek more information about this initiative (3)	o	o	o	o	o	o	o
...invest resources in this initiative (4)	o	o	o	o	o	o	o

To what extent do you agree with the following statement?

"I identify with the people in my neighborhood"

- o Strongly disagree (1)
- o Disagree (2)
- o Somewhat disagree (3)
- o Neither agree nor disagree (4)
- o Somewhat agree (5)
- o Agree (6)
- o Strongly agree (7)

To what extent do you agree with the following statements?

('We' is referring to you and your neighbours)

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
We feel like a group to me (1)	o	o	o	o	o	o	o

We are alike (2)	o	o	o	o	o	o	o
We see things much in the same way (3)	o	o	o	o	o	o	o
We spend time interacting (4)	o	o	o	o	o	o	o
We have been interacting for a while (5)	o	o	o	o	o	o	o
We want to achieve the same goals (6)	o	o	o	o	o	o	o
We strive for the same things (7)	o	o	o	o	o	o	o

To what extent do you agree with the following statements?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
People in my neighbourhood expect that I participate in such an initiative (1)	o	o	o	o	o	o	o

People in my neighbourhood would participate themselves in such an intiative (2)	o	o	o	o	o	o	o
People in my neighbourhood are doing something to help reduce the risk of climate change. (3)	o	o	o	o	o	o	o
This is an attention check. Please select 'Strongly agree' (6)	o	o	o	o	o	o	o
It is expected of me that I do my bit to help reduce the risk of climate change (4)	o	o	o	o	o	o	o
People in my neighbourhood think that I should personally act to reduce the risk of climate change (5)	o	o	o	o	o	o	o

To what extent do you agree with the following statements?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)

I have the ability to participate in this initiative effectively (1)	o	o	o	o	o	o	o
My participation will help accomplish the goals of this initiative (2)	o	o	o	o	o	o	o

To what extent do you agree with the following statements?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Our neighbourhood has the ability to participate in this initiative effectively (1)	o	o	o	o	o	o	o
The participation of our neighbourhood will help accomplish the goals of this initiative (2)	o	o	o	o	o	o	o

To what extent do you agree with the following statements?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
One of the best things I can do to improve my neighbourhood is to be of service to my neighbours (1)	o	o	o	o	o	o	o
It is easy to put aside my agenda in favour of the greater good of my neighbourhood (2)	o	o	o	o	o	o	o
I feel it is my duty to give to my community without needing to receive anything in return (3)	o	o	o	o	o	o	o

How often do these scenarios happen to you.

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
You are treated with less respect than other people (1)	o	o	o	o	o

You receive poorer service than other people (2)	o	o	o	o	o
People act as if they think you are not as good as they are (3)	o	o	o	o	o
People act as if they think you are dishonest (4)	o	o	o	o	o
You are threatened or harassed (5)	o	o	o	o	o

Thank you for your participation in this questionnaire. Your time is much appreciated.

Use the link below to find out more about the NK Tegelwippen initiative:

https://www.nk-tegelwippen.nl/meedoen/