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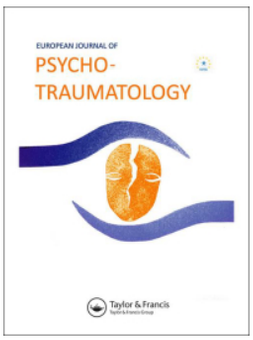

European Journal of Psychotraumatology

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/zept20

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To cite this article: Wouter Jong, Michel L. A. Dückers & Peter G. van der Velden (2021) Provision of social support by mayors in times of crisis: a cross-sectional study among Dutch mayors, European Journal of Psychotraumatology, 12:1, 1833645, DOI: 10.1080/20008198.2020.1833645

To link to this article: https://doi.org/10.1080/20008198.2020.1833645

Published online: 10 Mar 2021.

EUROPEAN JOURNAL OF PSYCHOTRAUMATOLOGY
2021, VOL. 12, 1833645
https://doi.org/10.1080/20008198.2020.1833645

EUROPEAN JOURNAL OF PSYCHO-TRAUMATOLOGY
THE OFFICIAL JOURNAL OF THE EUROPEAN SOCIETY FOR TRAUMATIC STRESS STUDIES

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BASIC RESEARCH ARTICLE

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Provision of social support by mayors in times of crisis: a cross-sectional study among Dutch mayors

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ABSTRACT

Background: During times of crisis, mayors may play an important role as public leaders and providers of social support to affected residents. However, empirical studies have not yet been conducted among the involved mayors about the support they provide and the factors associated with it.

Objective: The aim is to examine the support the mayors provided to the affected residents during crises and to test the possible determinants of this support.

Method: A web-based survey developed for this study, including a modified version of the Social Support Survey, was filled by 266 Dutch mayors (response = 66.5%), of whom 231 were involved in at least one crisis in their community in the past five years. We examined the association between the perceived support provided by the mayors and their years of experience, demographics, municipality size, and assessment of the collective impact of the crisis and their own political responsibility. Moreover, we tested the probability of mayoral home visits based on the same factors as well as loss of life.

Results: All of the involved Dutch mayors reported providing support, which varied from lending a listening ear to discussing public ceremonies and remembrances with the affected and their families. The mayors' age, sex, municipality size, and years of experience were not significantly related to the perceived social support provision or willingness to reach out to affected citizens. Apart from fatalities linked to the crisis, none of the factors tested had a significant effect on the probability of mayors making home visits.

Conclusion: Mayors are likely to report positively on how they provided social support to residents during crises regardless of the factors considered. Mayors are most likely to conduct home visits in situations where one or more citizens died. Further validation and replication of the social support measurement instrument is needed.

Prestación de apoyo social por parte de alcaldes en tiempos de crisis: un estudio transversal entre alcaldes holandeses

Antecedentes: Durante los tiempos de crisis, los alcaldes pueden jugar un rol importante como líderes públicos y proveedores de apoyo social a residentes afectados. Sin embargo, no se han conducido estudios empíricos entre los alcaldes involucrados sobre el apoyo que proveen y los factores asociados a aquello.

Objetivo: La finalidad es examinar el apoyo que los alcaldes proveyeron a los residentes afectados durante la crisis y evaluar los posibles determinantes de este apoyo.

Método: Se desarrolló una encuesta basada en la web para este estudio, incluyendo una versión modificada de la Encuesta de Apoyo Social, que fue completada por 266 alcaldes holandeses (respuesta=66.5%) de los cuales 231 estuvieron involucrados en al menos una crisis en su comunidad en los últimos 5 años. Examinamos la asociación entre el apoyo percibido provisto por los alcaldes y sus años de experiencia, demografía, tamaño de la municipalidad, y evaluación del impacto colectivo de la crisis y su propia responsabilidad política. Además, evaluamos la probabilidad de una visita domiciliaria de la alcaldía basados en los mismos factores así como también la pérdida de vida.

Resultados: Todos los alcaldes holandeses involucrados reportaron proveer apoyo, lo que varió desde escucha activa, ceremonias públicas y memoriales con los afectados y sus familias. La edad, sexo, tamaño de la municipalidad y años de experiencia del alcalde no se relacionaron en forma significativa con el apoyo social percibido que fue provisto o a la voluntad de acercarse a los ciudadanos afectados. Además de las fatalidades relacionadas con la crisis, ninguno de los otros factores tuvo un efecto significativo en la probabilidad de que los alcaldes realicen visitas domiciliarias.

Conclusión: Es probable que los alcaldes reporten positivamente sobre como proveen apoyo social a los residentes durante las crisis sin importar los factores considerados. Es más probable que los alcaldes realicen visitas domiciliarias en situaciones donde uno

ARTICLE HISTORY
Received 22 May 2020
Revised 17 August 2020
Accepted 15 September 2020

KEYWORDS
Collective crisis; social support; mayors; disaster; home visits; collective impact; political responsibility; deceased

PALABRAS CLAVE
Crisis colectiva; apoyo social; alcaldes; desastre; visitas domiciliarias; impacto colectivo; responsabilidad política; fallecido

关键词
集体危机; 社会支持; 市长; 灾害; 家访; 集体影响; 政治责任; 死者

HIGHLIGHTS

- We examined the provision of social support and used a mirrored version of the 20-item Social Support Survey.
- Mayors provide support to the residents of the community who are affected by crises.
- Mayors pay home visits to the affected in the aftermath of crises.
- Mayors' age, sex, municipality size, and years of experience are not significantly related to their self-perceived provision of social support.
- Mayors are most likely to conduct home visits when one or more citizens of the community died during a crisis.

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o más ciudadanos mueren. Se requiere posterior validación y replicación del instrumento de medida de apoyo social.

背景: 信息在危机时期, 市长们扮演着重要角色, 他们作为公共领导人向受影响居民提供社会支持。但是, 有关研究尚未就市长们提供的支持以及与之相关的因素进行实证研究。

目的: 研究目的是考察市长在疫情期间向受影响居民提供的支持, 并测试这种支持的可能决定因素。

方法: 为这项研究开发的网络调查 (包括社会支持调查修订版) 由266位荷兰市长 (应答率=66.5%) 填写, 其中231位过去5年中曾参与其社区中的至少一次危机应对。我们考察了市长提供的感知支持与他们任职年限, 人口统计变量, 市政规模, 危机的总体影响及其政治责任的评估之间的关联。此外, 我们根据相同因素和死亡人数考察对了市长家访的可能性的影响。

结果: 所有相关的荷兰市长均报告提供了支持, 形式范围从聆听反馈到与受影响者及其家人讨论公共仪式和纪念活动不等。市长的年龄, 性别, 直辖市的规模和经验的年限与所提供的社会支持或接触受影响公民的意愿之间没有明显关系。除了与危机相关的死亡人数外, 考察的所有因素均未对市长进行家访的可能性产生显著效应。

结论: 不论考虑什么影响因素, 市长可能都会积极报告他们在危机期间如何向居民提供社会支持。市长最有可能在一个或多个公民死亡的情况下进行家访。需要进一步验证和重复研究社会支持测量工具。

1. Introduction

The negative effects of disasters, especially on the mental health of the victims, are well-documented (Neria, Nandi, & Galea, 2008; Norris et al., 2002; Rubonis & Bickman, 1991). Ample research shows that typically, a minority of the affected develop a mental disorder – such as posttraumatic stress disorder or depression – while many more suffer from mental health problems – such as anxiety, depressive moods, fatigue, and sleep problems – that do not meet the formal criteria for mental disorders. Moreover, victims who lost their significant others may suffer from grief in the short, medium, or long term.

The course of mental health problems following disasters is dependent on many factors. According to the Conservation of Resources theory (Hobfoll, 1989, 2002; Hobfoll, Halbesleben, Neveu, & Westman, 2018), which is supported by research, victims who have lost or failed to gain important resources such as object resources (e.g. houses and tools for work), condition resources (e.g. social contacts and support, employment, tenure, and seniority), personal resources (e.g. key skills and personal traits such as self-efficacy and optimism), and energy resources (e.g. credit, knowledge, and money) are more at risk of post-event mental health problems and disorders.

Of these resources, post-disaster social contacts and social support from informal (such as partners, family, and friends) and formal networks (such as rescue workers, health authorities, and governmental representatives) are of particular interest. If these contacts provide social support that meet the needs of disaster victims, it may buffer or mediate the negative effects of disasters on their mental health. This is true for other potentially traumatic or stressful events as well. This indicates that the social environment of victims may play an important role in their post-disaster recovery (cf. Adams, Boscarino, & Galea, 2006; Birkeland, Nielsen, Hansen, Knardahl, & Heir, 2017; Cohen & Wills, 1985; Kaniasty & Norris, 2008; Maercker & Müller, 2004; Olff et al., 2019; Platt, Lowe, Galea, Norris, & Koenen, 2016; Van der Velden, Contino, Marchand, Das, & Schut, 2020; Yap & Devilly, 2004). Moreover, timely support is important because research has also shown that long-term mental health problems may erode social support at later stages (Kaniasty & Norris, 2008; Van der Velden, Oudejans, Das, Bosmans, & Maercker, 2019; Yap & Devilly, 2004).

However, two important aspects of post-disaster or post-trauma social support have received very little attention so far. In contrast to studies on risk factors for post-event mental health problems, predominantly PTSD symptomatology, very few scientific studies have focused on the factors (other than mental health problems) associated with post-event support (Van der Velden et al., 2020). Moreover, quantitative studies on post-disaster social support hardly make a distinction between the support provided by formal and informal networks. To date, empirical studies among providers of social support, as opposed to its receivers, are almost absent. Nevertheless, insight into the factors associated with the provision of social support is important for victims' services and the policymakers involved in post-disaster mental health programmes. It may help, given the protective role of social support, to develop evidence-based interventions to improve post-event social support or prevent a decrease in support.

The aim of this study is to help to fill this gap in scientific knowledge. We focus on mayors, a specific group of potential support providers within the formal network (Dückers, Yzermans, Jong, & Boin, 2017), who have so far received very little attention in disaster studies on social support. Nevertheless, they are in a position to offer psychosocial support in the channels that people use (Olff et al., 2019), and thus become a potentially effective psychosocial support 'vehicle' in times of crises (Dückers et al., 2017).

A media analysis following the MH17 disaster in Ukraine in 2014 – in which 193 passengers from 54 municipalities in the Netherlands lost their lives – found that mayors, as a sub-category of public leaders within the formal network, indeed fulfilled a supportive role for victims and their families. Besides speaking at memorials and attending community activities, they visited bereaved families at home and assisted them in their emotional and material needs (Jong, Dückers, & van der Velden, 2016). A qualitative study among the victims of several other crises showed that they expected governmental support to help them in a fair, compassionate, equitable, and reliable manner, including fulfiling event-related practical needs (Jong & Dückers, 2019). We assessed the provision of social support from the perspective of governmental representatives in the aftermath of a crisis in their community, in a manner comparable with studies on risk factors of, for example, PTSD. We assessed the extent to which the age, gender, and experience of the mayor are associated with the support they provided to disaster victims. The more a social system (such as a neighbourhood, community, or city) is emotionally affected by an event, including disasters, the higher the collective impact of that event (Barton, 1969; Jong, 2017). The interaction between the directly affected and public leaders unfolds within the context of a public leadership role in a society in shock. However, it is unknown if and how higher levels of collective impact are associated with the intensity of support provided by public leaders to the affected residents. At the same time, tensions might increase when public leaders are held to be politically responsible for a crisis (Boin, 't Hart, Stern, & Sundelius, 2005; Coombs, 1995, 2007, 2015; Jong, 2017). However, it is also unknown whether higher perceived political responsibilities are associated with the provision of support to individual residents. We focused on this specific form of support because previous research has shown that such visits are highly appreciated by the victims (Jong et al., 2016).

Therefore, the objective of this empirical study is to assess the perceived support provided and the home visits of Dutch mayors during a relatively recent crisis. We focus on crises with a public impact, as opposed to crises with a more private impact, such as deaths due to fatal disease or other natural causes (Hayes, Waddell, & Smudde, 2017). Crises with a public impact are deemed to be disruptive and catastrophic events that cause physical or psychosociological trauma to individuals, communities, organizations, and social support networks, regardless of whether they are directly or indirectly impacted by the crises (adapted from Doka, 2003; Gamino, 2003). They tend to be large in scope and enable many to identify with the victims or their circumstances (Hawdon & Ryan, 2011; Hayes et al., 2017; Kropf & Jones, 2014). This study is restricted to this particular setting because it enables us to determine the interaction between the public leaders' care for a society in shock and the support for the affected on a more individual level.

2. Methods

2.1. Participants and procedures

A cross-sectional study was conducted among Dutch mayors in 2018. All the 400 current and former mayors approached in this study are or were members of the Dutch Association of Mayors. They were invited to participate in this study, and the invitation was accompanied by a letter explaining the study. A web-based electronic questionnaire was administered between June 19 and 20 July 2018, and 266 mayors (response = 66.5%) participated and gave their written informed consent. According to Dutch law, the approval of a Medical Ethical Testing Committee (METC) was not needed for this study (WMO).

2.2. Instruments

The questionnaire administered was developed for this study. As some of the questions explicitly refer to the mayors' experiences with particular crises of the last five years, those questions were formulated in past tense. Questions that relate to their current, general perception of social support were formulated in the present tense. The items used are described below in detail.

2.2.1. Experiences with crises

The questions regarding the mayors' experiences with a recent crisis in their community were introduced as follows: *The following questions focus on a crisis you were involved in. With respect to the type of crisis, you can consider (deadly) shooting incidents, the closing of an illegal drug lab, car accidents killing one or more residents, sex offences, nuisance youngsters, earthquakes, outbreaks of animal diseases, and disasters such as MH17.* This was followed by the question, *How many of these crises in which residents were involved have you experienced in the past five years as mayor?* (1 = none, 2 = 1, 3 = 2–5, 4 = 6–10, 5 = 11–20, 6 = more than 20). The mayors were asked to describe the circumstances of the crises in their own words.

2.2.2. Provision of support

In the first part of the survey, the mayors were questioned about their general perceptions of the affected. Even though the latter are not always capable of formulating what they want and need (Jong & Dückers, 2019), the mayors may have a clear view of the social support they are able to offer as representatives of the government. To assess the provision of social support by the mayors, we used and modified the Social Support Survey (SSS) by Sherbourne and Stewart (1991). The SSS asks the respondents about received support, but for this study, the items were 'mirrored' into items concerning provided support. We did not mirror the items of the 'affectionate support' subscale of the SSS because this type of support does not necessarily fit into the mayor-affected relationship.

We asked the mayors who had been confronted with at least one crisis the following: *The next questions are about your role with respect to the people (victims, bereaved) affected by a crisis. Can you rate how often you provide the following towards these victims?* The mirrored SSS consisted of items such as *I provide a listening ear* and *I am available for their personal problems*. As in the SSS, all the items had five-point answer categories (1 = never, 2 = seldom, 3 = sometimes, 4 = mostly, 5 = always). We also added four additional questions aimed at the interaction between the governmental background of a public leader and their role in public displays, such as commemorations and gatherings, in the aftermath of crises. For an overview of the full SSS and 'mirrored' SSS, including the additional items, refer to Appendix.

An exploratory factor analysis was conducted on the 20 items of the questionnaire to verify the underlying structure of the data. The factor analysis, based on the entire data of the 231 mayors, enabled the 20 items to be divided into two constructs with an eigenvalue higher than 1. All but two items – *I distinguish among the support I provide towards the affected* and *I need to conquer bureaucratic challenges in order to provide support* – loaded higher than 0.4 on the first construct. One item loaded 0.45 on the second construct, and the rest lower than 0.4. Therefore, we decided to undertake the subsequent analyses with one construct based on the 18 items (Cronbach's alpha = 0.82).

2.2.3. Specific crisis

In the second part of our survey, we asked the mayors about the social support they demonstrated in a recent crisis. This was introduced as follows: *For the next questions we would like to ask you to take one recent crisis that took place in your current or previous city in the period 2014–2018) in mind. Can you describe this event briefly?* The description of the crisis enabled us to reconstruct, based on public data, whether people were killed in it.

This reconstruction also enabled us to take into account the scale of the events, such as the number of deaths, which is different from collective impact. For instance, a relatively small event, such as child abuse, can have a large impact. The MH17 disaster (2014), which caused the death of 195 people of Dutch origin, provided a unique opportunity to assess the aspect of impact, as no other crisis in the Netherlands in the past five years was as large, given the national and international circumstances. The mayors who were involved in the aftermath of the MH17 disaster were asked to answer the following questions with this event in mind. These questions were also added for future research aimed at MH17.

2.2.4. Perception of collective impact and responsibility

The mayors involved were asked to consider the MH17 crisis while rating their answers to the question, *How large was the collective impact of this crisis on the village, neighbourhood or city during the first day and weeks after the crisis?* on a 10-point scale (0 = no impact, 10 = large impact). They were also asked to rate their answer to the question, *How large was your political/administrative responsibility for this crisis in the village, neighbourhood, or city during the first day and weeks after the crisis?* in a similar manner.

2.2.5. Home visits

The respondents were asked, *Did you meet the affected or their families at their homes?* with four answer categories: 1 = not one affected or family visited, 2 = all those directly affected or affected families visited, 3 = part of the directly affected or affected families visited, 4 = other. For this study, we made a distinction between home visits – yes (2, 3) or no (1, 4).

2.2.6. Biographical details

Finally, information was collected about the mayors' age, sex, number of days in office, and current municipality size. Regarding days in office, one's entire career as a mayor was taken into account, including service in previous municipalities.

2.3. Data analysis

The provision of support as perceived by the mayors was assessed using the scores of the separate items of the mirrored SSS. Multiple regression analyses were conducted with the Social Support Provision sum-score as the dependent variable and the mayors' age, sex, days in office, and municipality size as the predictors.

Multivariate logistic regression analyses were conducted, with home visits after the selected crisis as the

dependent variable. To assess whether or not the support provided was related to the mayors' age, sex, municipality size, or years in office, these items were entered as predictors. Social support was added to the list of predictors in model 2, collective impact and political responsibility were added in model 3, the variable *residents died because of the event* was added in model 4, and finally, the variable MH17 (yes/no) was added in model 5.

A deviance test was used to compare each model with its predecessor; deviance can be regarded as a measure of the lack of fit between the model and the data. The greater the deviance (−2 loglikelihood; IGLS), the poorer the fit. It is a tool that can be used to assess whether each subsequent model leads to a substantial reduction in deviance.

All analyses were performed using Stata version 13 (StataCorp LP).

3. Results

3.1. Participants

In total, 231 of the participating mayors completed the social support questions (response = 57.8%). The average age of the participants was 57.1 years (sd = 7.69, n = 229), compared to 57 for Dutch mayors in general, while 22% of all participants who provided information on gender (n = 208) were female, compared to 27% in general. The average time respondents had served as mayor was 9.1 years (sd = 6.09, n = 198). The average number of inhabitants in the mayors' municipalities was 39,349 (sd = 37,594.94, n = 229). Results are presented in Table 1.

3.2. Social support provided by mayors

On average, the mayors rated the separate social support items between 3 ('some of the time') and 5 ('all of the time'; mean = 3.79, range = 2.61–4.78, sd = 0.42). The three items with the highest scores were '*I provide a listening ear*,' '*I make time for personal contact*,' and '*I discuss the impact on themselves*.' The lowest average scores were '*I connect the affected with other people who were involved in the incident*,' '*I need to conquer bureaucratic challenges in order to provide support*,' and '*I mobilize people (friends, neighbours) around the affected in order to support them*.'

3.3. Predictors of the provision of social support

The results of the linear regression analysis (n = 196) showed that age, sex, days in office, and the number of inhabitants were not significantly associated with the social support mayors provided (data not shown). Together, the variables explained 1% of the variance in social support.

Table 1. Scores per mirrored item (n = 231).

Items	mean	sd	min	max
I provide a listening ear	4.56	0.54	3	5
I clarify the circumstances in which they find themselves	3.89	0.73	2	5
I support them to understand the crisis situation	4.03	0.69	2	5
I discuss the impact on themselves	4.49	0.60	3	5
I offer them support and advice	3.67	0.81	1	5
I present myself as an anchor for care and support	3.68	0.83	1	5
I am always ready and prepared to support them	3.87	1.00	1	5
I am available for their personal problems	3.96	0.83	1	5
I do understand their personal problems	4.09	0.58	2	5
I am always clear as to what people can expect from me (as a mayor)	4.45	0.63	2	5
I offer the assistance of public servants to help them with financial matters	3.20	1.01	1	5
I offer the assistance of public servants to help them with media pressure	3.49	1.01	1	5
I make time for personal contact	4.56	0.60	2	5
After a year, I contact the affected again	3.03	0.89	1	5
I mobilize people (friends, neighbours) around the affected in order to support them	2.88	0.91	1	5
I connect the affected with other people who were involved in the incident	2.76	0.84	1	5
I distinguish among the support I provide towards the affected	3.13	0.97	1	5
I make my professional network available to the affected	3.66	0.80	1	5
I need to conquer bureaucratic challenges in order to provide support	2.84	0.88	1	5
I discuss public ceremonies and remembrances with the affected and their families.	4.02	1.18	1	5

3.4. Predictors of home visits

The mayors were asked to describe a recent crisis, i.e. one before 2012, in which they had been involved. Of the 164 mayors who provided information on home visits in their crises, the majority reported that they paid home visits to the affected (n = 139, 84.7%).

The results of the logistic regression analyses are presented in Table 2. Due to missing values, the analyses were conducted among 150 mayors. The results of the factor analysis were the same as in the sample with 231 cases – one construct based on 18 items with a Cronbach's alpha of 0.84. The results of the linear regression analysis on the social support provided by the mayors were not different from the sample with 196 cases – no predictor variable yielded a significant effect.

These participants were not strikingly different from the broader sample of 231 mayors. The average age of the participants was 56.6 years (sd = 7.95, n = 150), compared to 57.1 years for the earlier sample, while 22.67% of the participants were female. The average time the respondents had served as mayor was 8.1 years (sd = 5.69, n = 150). The average number of inhabitants in the mayors' municipalities was 38,771 (sd = 38,405, n = 150).

Model 1 in Table 2 demonstrates that age, sex, days in office, and the number of inhabitants were

Table 2. Summary of logistic regression analyses predicting home visits (n = 150).

	Model 1	Model 2	Model 3	Model 4	Model 4
Variable	Adj. OR (CI 95)	Adj. OR (CI 95)	Adj. OR (CI 95)	Adj. OR (CI 95)	Adj. OR (CI 95)
Average (intercept)	2.79 (0.06–127.53)	5.15 (0.03–1049.33)	1.12 (0.00–290.20)	1.35 (0.00–529.22)	1.69 (0.00–710.83)
Age	0.99 (0.93–1.06)	0.99 (0.93–1.06)	1.01 (0.94–1.08)	1.00 (0.93–1.07)	1.00 (0.93–1.08)
Sex (women vs. men)	2.13 (0.57–7.99)	2.17 (0.58–8.20)	1.59 (0.40–6.24)	1.83 (0.44–7.67)	1.57 (0.36–6.90)
Days in office	1.04 (0.93–1.15)	1.04 (0.93–1.15)	1.01 (0.91–1.13)	1.01 (0.90–1.13)	0.99 (0.88–1.12)
Residents	1.02 (0.68–1.52)	1.01 (0.67–1.52)	0.95 (0.63–1.45)	0.99 (0.64–1.52)	0.97 (0.63–1.50)
Social support	-	0.84 (0.28–2.46)	0.91 (0.30–2.79)	0.78 (0.24–2.54)	0.77 (0.24–2.50)
High (vs. low) impact	-		1.24 (1.00–1.53)*	1.15 (0.92–1.45)	1.18 (0.93–1.49)
High (vs. low) responsibility	-	-	0.95 (0.77–1.17)	1.04 (0.84–1.29)	1.02 (0.82–1.27)
People killed (yes vs. no)	-	-	-	4.50 (1.44–14.06)**	3.31 (1.03–10.63)*
MH17 (yes vs. no)	-	-	-	-	(omitted)
Log likelihood	−59.9171	−59.8643	−57.9389	−54.1647	−52.8297
Deviance test	Reference	p = 0.745	p = 0.146	p = 0.006	NA (n = 131)

ADJ. OR = Odds ratio adjusted for other variables in the model. CI 95 = 95% confidence interval of OR.
* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.
NA = Not applicable.

not associated with home visits. The same pattern was found for all other variables, except the variable *'high collective impact'* in model 3 and *'residents died because of the event'* in models 4 and 5. According to models 4 and 5, the mayors paid home visits more often when residents had died because of the event.

The probability of a home visit was slightly lower in model 5, which excluded the MH17 cases due to a lack of variation. In all MH17 cases, a home visit was made. In other words, after the MH17 disaster, mayors were more tempted to make home visits compared to other crises where citizens died. With the MH17 cases included in the analysis, the odds ratio of a home visit on the event of a death was 4.5; without MH17 cases, it dropped to 3.3. Model 4 exhibited a significantly better fit than the previous models (p = 0.006). The (small) collective impact's effect in model 3 was sustained when the MH17 cases were removed from the sample (OR = 1.25; $p < 0.05$; n = 131).

4. Discussion

To the best of our knowledge, this is the first empirical study focusing on mayors regarding the social support they claim to provide to the residents affected by various crises in the past five years. Almost 60% of the Dutch mayors invited participated in our study. Of the 231 mayors who completed the social support questions, 219 were recently involved in a crisis situation. For several questions about household visits, the mayors were asked to keep this recent crisis in mind. All cases described happened in the past five years. In addition, we assessed the factors most closely associated with home visits to the affected residents.

Concerning the social support scores, the findings indicate that the mayors generally have a tendency to report positively about the social support they provided to the affected residents, regardless of particular crisis situations. Indeed, the mean of the mirrored SSS sum-score was 3.79, which was on the far end of the brackets between 'some of the time' and 'most of the time.' The scores on the separate items showed that there were no items in the mirrored SSS that were not endorsed by all the mayors. Overall, the mayors reported supporting the affected by offering a listening ear, providing practical assistance, and helping with media management. The items with the absolute lowest mean scores (scores < 3, never or seldom) were '*I need to conquer bureaucratic challenges in order to provide support*' and '*I mobilize people (friends, neighbours) around the affected in order to support them.*' Apparently, the mayors did not perceive bureaucratic challenges in the aftermath of crises. Moreover, they appear to have maintained a professional distance, as evidenced by their hesitation to interfere with existing relationships between the affected and their family, friends, and neighbours. Two questions that were added to the mirrored SSS sought to ascertain the interaction between the mayors' public roles and the direct support they provided to the affected in the aftermath of crises. The findings showed that the mayors were willing to make their professional networks available to the affected (mean = 3.66) and discuss public ceremonies and remembrances with the affected and their families (mean = 4.02). The mayors' age, sex, days in office, and municipality size had no significant association with their views on social support.

When asked about their experiences in specific crises, the mayors were found to make home visits in case of fatalities, which usually occurred in events with a larger collective impact. Mayors are most likely to conduct home visits in situations where one or more citizens died.

We did not measure a negative side-effect of potential political responsibility. Moreover, a high collective impact was not required for mayors to contact the affected and visit the bereaved. This can

be deemed akin to the role of a mayor as a 'buddy' (Jong, 2017), where they contact the affected and discuss preferences at an appropriate level of governmental support. This may explain why home visits were not associated with the social support mayors generally provided to the affected residents.

Regarding the MH17 disaster, the mayors who held positions in the affected communities were in direct contact with the next of kin and paid home visits. We can conclude that in terms of the social support provided, the mayors paid home visits slightly more often in the aftermath of MH17, as compared to other crisis situations in which citizens died.

5. Implications

These findings are consistent with earlier findings from a social media analysis following the MH17 disaster (Jong et al., 2016), which showed that mayors provided both tangible and intangible support in the aftermath of the crisis. Moreover, our results shed light on the mechanisms through which mayors can serve as a channel (Olff et al., 2019) or a vehicle (Dückers et al., 2017) for the provision of social support to crisis-affected individuals.

Although we found no association between the level of impact and the responsibility, on the one hand, and home visits, on the other, public expectations may result in a degree of pressure to contact the affected, as mayors realize that they may find themselves in troubled waters should they fail to demonstrate their commitment and social support. However, it is possible that home visits are primarily conducted for political reasons other than political responsibility for the crisis, as part of the typical rituals undertaken in the aftermath of crises ('t Hart, 1993; Helsloot & Groenendaal, 2017), and exercised in order to avoid negative attention from the media and the public ('t Hart, 1993). For instance, mayors may have paid home visits despite a lack of intrinsic motivation to support the affected. We have no data to reject or confirm this possibility, but we assume that given that political responsibility and impact were not related to home visits, the mayors' provision of support to the affected was more strongly associated with a sense of community (McMillan & Chavis, 1986). Such a sense of community can be defined as a feeling that the citizens matter to one another and people have a sense of belonging to the local community.

Future research is necessary to confirm or reject the notion that the provision of social support and home visits is positively associated with a sense of community among the mayors. An earlier study by Broekema, Porth, Steen, and Torenvlied (2019) showed that Dutch mayors scored highly in terms of public service motivation, suggesting that they may also score highly on having a sense of community.

This study shows that the vast majority of mayors behave in a supportive manner towards people within the community who are facing a crisis. Even though their job description does not require them to provide social support on an individual level, the results imply that they tend to be considerate of the well-being of their individual citizens. This supports the idea that public leaders can be added to the meaningful psychosocial support 'channels people are familiar with' (Olff et al., 2019) and can indeed serve as a psychosocial support 'vehicle' in times of hardship (Dückers et al., 2017). In order to optimize this potential of public leaders, it is important that they gain knowledge on psychosocial support principles.

6. Strengths and limitations

In contrast to the majority of studies on social support, which focus on received support, this study assesses the providers of social support and the assistance they offer to the people affected by a collective crisis. Moreover, this is the first empirical study to examine the provision of support by mayors. In this study, we focused on the support mayors provide in general, and home visits in particular, as a special form of social acknowledgement. We had no further information about the frequency of these home visits or the affected family members who were visited. We were therefore unable to examine the extent to which factors such as collective impact and responsibility were associated with the number of home visits. Moreover, we did not ask the participants how they dealt with situations of broken families and affected people living in other cities (e.g. where the deceased were residents of their city, while their relatives lived in another city), and how this influenced home visits. Unfortunately, our study was limited to the vantage point of the mayors, even though it would have been interesting to include the views of other actors in the service provision, especially the affected residents themselves. This would, beyond doubt, have added valuable insights on the meaning, value, and relativity of the self-perceived social support ratings. Given the cross-sectional design, we were not able to statistically examine possible changes in the role of the mayors during the past five years. We cannot rule out the possibility that about five years ago, the mayors acted differently because the public held different expectations as compared to the present, which may have affected our results.

This study addresses a relevant, understudied topic in the study of social support in crises, using an existing validated instrument as a starting point. The measurement of the self-perceived provision of

social support in this sample of Dutch mayors resulted in one construct based on 18 items with good internal consistency reliability. Although promising, the current study is a pilot study that needs to be validated and warrants further replication, preferably in other professions and among different service providers. A noteworthy limitation is that the self-report method for the social support scores and case descriptions may be susceptible to self-presentation bias, self-confirmation bias. and social desirability. Finally, our study was conducted in the Netherlands. Therefore, generalizations to crises in countries where mayors have alternative roles in local government must be made with care. Future studies that replicate our study in other countries are warranted.

7. Conclusion

Findings revealed that the level of perceived support provided by mayors to people affected by crises is independent of age, sex, experience as a mayor, or the size of the municipality. In addition, the results demonstrated that mayors are most likely to visit the affected at home in situations where one or more citizens died. Such home visits cannot be entirely separated from the collective impact of a situation, but they are unrelated to the perceived political responsibility of the mayor involved. As such, the study illustrates how public leaders can serve as a channel or vehicle for the provision of social support to crisis-affected individuals. More empirical follow-up studies on this issue would help us build on our currently scant academic knowledge on how providers of support perceive this support.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This research received no specific grant from any funding agency in the public, commercial, or non-profit sectors.

Data availability statement

Datasets generated and analyzed during the current study are not publicly available because they contain more than two indirect identifiers (e.g. size of municipality, age of mayor, time in office) of human research participants that cannot be sufficiently anonymized for a public repository. The datasets are available from the corresponding author on reasonable request.

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Appendix. Original questions by Sherbourne and Stewart (1991) versus the mirrored questions from this study

Items original RAND questionnaire	Items mirrored questionnaire (used in current study)
Emotional/informational support	**Emotional/informational support**
Someone you can count on to listen to you when you need to talk	I provide a listening ear
Someone to give you information to help you understand a situation	I clarify the circumstances in which they find themselves
Someone to give you good advice about a crisis	I support them to understand the crisis situation
Someone to confide in or talk to about yourself or your problems	I discuss the impact on themselves
Someone whose advice you really want	I offer them support and advice
Someone to share your most private worries and fears with	I present myself as an anchor for care and support
Someone to turn to for suggestions about how to deal with a personal problem	I am always ready and prepared to support them
Someone who understands your problems	I am available for their personal problems
	I do understand their personal problems
Tangible support	**Tangible support**
Questions about the support in getting to bed, getting meals ready, support in doing some shopping.	I am always clear in what people can expect from me (as a mayor)
	I offer the help of public servants to help them with financial matters
	I offer the help of public servants to help them with media pressure
Affectionate support	**Affectionate support**
Questions about hugging, love and affection	None
Positive social interaction	**Positive social interaction**
Questions about hanging out with someone and how enjoyable this support is	I make time for personal contact
	After a year, I contact the affected again
	I mobilize people (friends, neighbours) around the affected in order to support them
	I connect the affected with other people who were involved in the incident
Additional item	**Additional items**
Someone to do things with to help you get your mind off things	I distinguish among the support I provide towards the affected
	I make my professional network available to the affected
	I need to conquer bureaucratic challenges in order to provide support
	I discuss public ceremonies and remembrances with the affected and their families