Governing Urban Transformation

Reporting on Students Satisfaction of the

City of Manchester's

'Slim' Bin Policy and its Implications for governance

12th May 2017

Jay De-Gilbert and Louis Crompton

Word Count: 2561

Table of Contents:

Tabel of figures

Appendix

Abstract:

Urbanisation has seen an increase in environmental problems for our 21st century cities. Manchester Climate Change Agency (MCCA) is an organisation formed under the Cities Council and participates in climate change mitigation. They aim to incorporate all actors in Manchester to becoming carbon literate. Reaching this ambitious target has meant various policy changes, one specifically, the 'slim' bin policy passed in August 2016 has been met with opposition. Whilst it has been commended that recycling rates will improve, the dissatisfaction felt amongst residents raises the question of whether the scheme is appropriate. Through a quantitative analyses of Student's opinions in Fallowfield, Manchester using social surveys this investigation argues that their discontent with the new policy exploits its flaws and a reorganisation of current governance is needed. Contradictory to socialism the act represents a neoliberal form of governance where the feelings of individuals are undermined. We reflect on this arguing that a holistic approach needs to be considered alongside recognition of recycling schemes elsewhere in Europe and how they can better Manchester's.

1. Introduction

Bins have been used across Europe as a mode of engagement in getting people to recycle. Their practicality prevents streets becoming land sites of rubbish and allows concise assortment of recyclable products. Manchester Climate Change Agency (MCCA) emphasise the value of recycling in 'saving the planets resources' (MCCA, 2017a: 1). In 2015 the city of Manchester had the worst recycling in Greater Manchester at -32.8pc (Williams, 2016). Hindering Manchester's sustainable image and failing to show any sign of meeting the 2020 EU recycling target of 50% the city council delivered a new bin policy in August 2016 that replaced the current bulky bins with smaller ones with hope this would prompt more people to recycle. While councillors such as Nigel Murphy insist that recycling rates are projected to increase as bins will hold '40% less waste' (BBC, 2016), the new rules have been met with contestation with people arguing they can't hold there excess waste. Byrne, (2017) documents that this has in fact reversed the process as an unprecedented increase (30%) in fly tipping is occurring. In the MCCA's 'Climate Change Strategy 2017-50' they document a need to pursue cultural change and everyday behaviours to becoming carbon literate (MCCA, 2017b).

Using a quantitative survey this study conducts a micro scale investigation into the feelings university students in Fallowfield, Manchester have on the new policy. Although this doesn't speak for everyone in Greater Manchester it engages with familiar identities which promise feasible data collection and accurate results. Two aims are pursued; firstly to judge whether the policy has effectively induced 'cultural change' or instead represents a form of socialism in which people are made to 'act' and secondly, taking inspiration from strategies elsewhere in Europe whether amendments should be made and a more holistic approach to governance adopted. The MCCA may like to consider this study to gain a better understanding of people's attitudes towards the policy in a specific location and ways they can manipulate it in order to satisfy their needs.

2. Literature Review

The complexities of 21st century cities and the challenges they inhibit make action from a diverse set of actor's imperative to meeting ambitious targets of sustainability. Manchester Climate Change Agency was established in 2015 by the city council, BDP and 'A Certain Future Steering Group'. Its programme director Jonny Sadler intends to incorporate everyone in the fight against climate change in an effort to keep global temperature changes within 1.5-2oC of pre-industrial levels (MCCA, 2017a). Their 'Manchester climate change strategy' hopes to accomplish a 'zero waste, climate resilient city' but is wary about the current rate of progress (MCCA, 2017b). Highlighted was the challenge of recycling. It was estimated in 2016 that Manchester had the worst recycling in Greater Manchester at - 32.8pc (Williams, 2016). This is a growing concern for MCCA and policymakers as it hinders efforts towards sustainability.

Recycling has extensive coverage in academic literature. However, few studies have directly engaged with students in particular (Austin et al., 1993). From the studies that have, the most important findings conveyed the barriers that influence recycling habits. Zhu (2016) elucidates that behavioural barriers were determined as the definitive constraint to pro-recycling behaviours. Work by WRAP (2014) suggests these to comprise of household disorganisation, busy lifestyles and 'forgetting' to sort waste out. Klaiman et al. (2017) reiterates a similar conception implying that knowledge barriers including a discrepancy of not knowing what goes in which bin may also account for bad recycling habits.

An important requisite for this report considers recycling schemes elsewhere in Europe. Figure 1 shows a literature account of the main features of recycling schemes elsewhere in Europe. Each scheme different from the other all showing original and innovative solutions which can inspire changed to Manchester's bin policy.

European City/Region	Recycling Initiative	Effectiveness
Vienna, Austria (Kranzinger et al, 2017)	'Catch-all-plastics bin': - Holistic approach. - Transferring recyclables from the residual waste system to a separately collected waste system by introducing the described bin.	• Increase in the amount of plastics collected by 33.9%. • Positive impact on Carbon footprint in accordance with EU directive 94/62/EG. • Only moderate cost.
Catalonia, Spain (Davies, 2016)	Communal Bins: - Collection six days a week. - Large communal bins on streets, no restrictions on items that go in them.	• Municipality achieves a 70% recycling rate.
Aschaffenburg, Germany (Morlok et al., 2017)	'Pay-as-you-throw': - 'Polluter pays' principle where people are charged based on amount of waste.	• If conceived with a good level of citizen awareness, high collection rates are obtained.
Lyon, France (BI, 2016)	Smart Trash-Can: - Barcode scanner to determine whether a piece of rubbish is recyclable.	• Been proven to boost the city's recycling rates as a fun, interactive initiative. • Can contribute to the development of 'smart cities'. • Highly expensive.
Newport, South Wales (Wastesavers, 2017)	Kerbside Recycling; Small boxes: - Small colour-coded boxes as opposed to wheelie bins. - Kerbside collection initiative where recycling is assorted on the street.	• Cheap, practical and easily mobile. • Looking likely to meet 70% recycling rate target.
Surrey, England (Shearer et al., 2017)	Visual prompts: Stickers: - A sticker headlined 'NO FOOD WASTE PLEASE' stuck on every bin.	• Significant and sustained impact on food waste recycling rates. • Practically feasible and inexpensive (£0.35 per household).

(Figure 1: Table showing recycling initiatives elsewhere in Europe)

Achieving an effective policy can be difficult. These difficulties are likely to intensify in the midst of Brexit as uncertainty could potentially enforce de-investment in the recycling industry (Polya, 2016). Additionally, academics have also argued that social policies can represent neoliberalism in which people feel they are 'forced' to act in a manner they may not necessarily want to (Ball and Olmedo, 2013). Li (2007) positions the analytic of governmentality as drawing attention to the ways subjects are positioned in relation to governmental programmes. Where policies fail to address the feelings of agents they target, power can felt to be exerted on them evoking 'reciprocal incitation' (Foucault ,1982, 222). In this demeanour, governments risk producing effects that are contradictory and pertinacious.

Whilst it is commendable that the current literature on recycling and urban policies covers fundamental areas in the domain gaps in knowledge do exist. As this policy hasn't yet been investigated in this specific context, this investigation will provide new insights into urban governance and environmental attitudes in Manchester through the lens of the new bin policy. MCCA highlight that to meet 2050 targets of Manchester becoming a 'zero carbon' city we must first all become 'carbon literate'. However, this cannot be accomplished if policies such as the new bin policy are showing discontent amongst residents. We argue that our cities need a 'bottom-up' holistic approach to governance if we are to meritoriously evoke behavioural change.

3. Methodology

3.1 Quantitative approach

Quantitative research is the use of statistical methods which gather numerical measurements of an investigation. The approach intends to use the measurements to create generalizable results which can be used to predict the issue at hand (Thomas, 2011). Quantitative methods test confirmations based upon a predetermined hypothesis in order to determine a theory (Newman and Benz, 2006). An Interview with Steph Lynch from the MCCA was used to gather an understanding of the organisation's role with recycling, details about the policy and its progress. This gave us the focus for our research as she highlighted the policy as one of the key implementations of the past year enticing us to delve deeper into its effect. Once key themes and questions were devised from the interview, an online survey was created to collect data.

3.1.1 Audience

We focused on students mainly because they were a realistic demographic we could contact and rely upon. This is because the online questionnaire was posted on Facebook within Fallowfield based groups. As students we are embedded within the student and local culture which allows us to have prior understandings of the best ways to approach this research.

3.1.2 Research Location

Reviewing Academic literature lead us to acumens that recycling behaviours vary in different contexts (Moore & Moore, 2001). Therefore, by narrowing our data collection down to the student residential area in Fallowfield we hope to provide new findings into how explicit recycling habits and attitudes to policies are in such a specific location. We believe that by doing so it will help MCCA gain a better understanding into the micro-dynamics of the issue as experiments on these geographically smaller locations can feed into larger datasets of Greater Manchester. The Fallowfield area is found within southern

Manchester and holds the largest student accommodation complex. The area assessed is easily accessible and already known to the researcher, which will make the data collection more effective.

3.1.3 Online Survey

Questionnaires were crucial to this research to gather large amounts of data from the chosen sample. Surveys are an important tool within geographical practices and can be used to gather information on the attitudes of populations in a number of research topics (Fosnacht et al., 2017). The benefits of using a survey involve the ease of gathering large quantities of data with little effort, interviewer bias and low cost creation (Fowler, 2014). Many of the well-known limitations, such as a lack of detailed information, are countered by the fact that the survey involves a mixture of open and closed questions (Shipman, 2014).

The survey was conducted on Google Forms, a free platform that is easy to use with no distribution cost. After posting the survey on several Facebook groups such as Fallowfied buy/sell ticket it reached 60 participants after 48 hours, at which point we stopped accepting responses as we felt we had enough to draw up intuitive conclusions.

When creating questions we aimed to discover the level of understanding that participants had on the bin policy and their opinions. We also provided a question with a mix of possible quantitative and qualitative answers where respondents were asked what they thought could better the policy using examples elsewhere in Europe mentioned in the literature review.

3.1.4 Limitations

The greatest limitation we experienced involved scale. As it was a small scale project limited to student participants it is possible a skewed generalisation of opinions was gathered making it inappropriate as a representative of the whole of Greater Manchester. However it is also important to note that this project provides a structure for future research to discover whether other demographics hold the same opinions as students.

4 Results and Discussion

Our results relayed much of what was expected with the majority of students (56%) claiming they were 'unhappy' about the new policy. However, we did not expect the bulk of respondents (93%) to appreciate climate change as an issue that needs undivided attention. Our reasons for this equate to the conditions that if this was the case then their explicit dissatisfaction with the new bin policy wouldn't exist as they would be motivated to accept minor flaws if it meant such a substantial improvement could be made. This section provides further analysis to the findings conclusive to this study.

4.1 Recycling rates and carbon literacy

The MCCA pushes for carbon literacy in which a widespread cultural change in recycling behaviour would follow. Due to Manchester's low recycling rates it is understandable why such a proposal was pushed upon the residents with little room for debate. Although it is predicted rates are expected to increase and save £2.4 million annually in costs (Moore, 2017) it is not clear whether the people of Manchester have adapted their routines to increase recycling. When participants were asked whether they were aware of the new policy a large majority (66.7%) claimed they were not. After this participants were then questioned "How content with this policy are you?" and "Do you think that the new policy has encouraged you to recycle more?" respectively, (56%) of respondents argued they were unhappy with the policy, (48.3%) found they were not sure whether it increased their recycling and a further (31.7%) stated it did not.

Such results show that the push toward carbon literacy, expressed within their strategy, is currently failing as most respondents were not even aware of the change. Further, their dissatisfaction leads us to believe that the policy represents a form contradictory to socialism aforementioned in the literature review by Foucault (1982) where subjects are made to act under political structures. We argue that numerical recycling improvements alone will not evoke cultural change but instead healthy relationships between different

stakeholders and meeting the needs of everyone will. The unhappiness from residents further emphasises how the inhabitants of Manchester are being seemingly undermined in policy designs. However it is also important to note as students are temporary residents that possible forms of communications are ignored or not received.

It is evident from this analysis that a negative opinion is dominant. The results suggest that the policy is simply not effective in promoting climate change awareness or participation. Although an improvement in rates is predicted, it is unlikely that climate change awareness and environmental precautions will occur without wider cultural change. Thus we argue for a reorganisation of governance that embraces a holistic approach, which will be further examined in the next section.

4.2 Suggestions for Policy Improvements

One question the survey inquired was 'What amendment to the bin policy would be most effective?' Here, examples from elsewhere in Europe were suggested. The most popular (35%) were visual prompts implemented in Surrey; stickers' displaying how much recycling alleviates climate change issues. Closely followed was the admission of more frequent collections (30%) as opposed to the fortnightly ones that exist. We argue that these changes can be incorporated with very little time and money constraints being highly applicable. Surrey exists in the same national context as Manchester making following suit an easy ordeal. The difference in resources, knowledge and status between Manchester and Surrey has led us to a new conclusion. We propose that Manchester being such a powerhouse tends to focus on initiatives that entail large technological change and funding sometimes overlooking the simple ideas that work in smaller areas. Manchester is a forward thinking city with major funding and knowledge where initiatives like the recycling stickers can be easily applied. We therefore suggest that more emphasis needs to be placed on the approach taken by MCCA and other stakeholders. Mike Hulme (2009:310) claims that climate change is a 'crisis of governance,' and our findings seem to comply. The results show that (38.3%) of respondents agreed that the local council neglected public insight in the design of the policy. We argue that this weakens the ratification of its successes and a more holistic approach should be taken. This would entice the potential for rapid development of

a sustainable societal future (Taylor and Taylor, 2007). Reasons being that incorporating public opinion in the design allows all voices to be heard ensuring that any discrepancies people may have can be measured to produce a more efficient policy. Whilst we appreciate the needs of everyone cannot be met, through the use of household surveys and investigations similar to this policymakers can gain better insights into what the inhabitants of Manchester desire which will effectively transpire into carbon literacy if a better relationship between the public and council is achieved.

5. Conclusion

Recycling efficiently beholds the potential to explicitly reduce the production of harmful packaging that contributes to the adverse effects of climate change. Through an analyses of the new recycling bin policy using surveys deployed to individuals essential to the future sustainability of Manchester, this investigation documents that stakeholders in governance are failing to appreciate the extent of which climate change mitigation is as much a socio-cultural issue as it is economic or political. Respondent's dissatisfaction with the policy suggests that their voices have been neglected in the design process. We concur that this veracity reinstates the need for a holistic approach to urban governance that sees past the ratification that 'recycling must be improving if the numbers are saying so' and instead incorporates the opinions of citizens to meet their needs which will in time translate to cultural change. It also goes without saying that policymakers should look to policies elsewhere in Europe for inspiration. Strategies like the 'recycling stickers' adopted in Surrey proved popular amongst the participants surveyed and manifests as a cheap, easy to implement way to improve the current policy in Manchester. Harvey (1982) understood the city to be a 'social construct' in which all actors had to play an equal, co-operative role in order to keep a balance. If we are to develop efficient smart cities that comprehend carbon literate citizens and meet the ambitious 2050 targets by the MCCA to make Manchester 'carbon zero', governance needs to be 'bottom-up' with a clear emphasis on citizens sharing data on ways the city can be improved. Recommendations for further research would investigate the whole of Greater Manchester under a greater budget and more time to gain a more influential response for MCCA and policy changes.

References:

Austin, J., Hatfield, D., GrindIe, A. & Bailey, J. (1993). Increasing recycling in office environments: the effects of specific informative cues, Journal of Applied Behavioral Analysis, 26,247-253.

Ball, S. and Olmedo, A. (2013). Care of the self, resistance and subjectivity under neoliberal governmentalities, Critical Studies in Education, [online] 54(1), pp.85-96. Available at: http://www.tandfonline.com/doi/abs/10.1080/17508487.2013.740678 [Accessed 7 May 2017].

BBC. (2016). 'Slim bins' could boost Manchester's recycling rates, says council, BBC, [online] p.1. Available at: http://www.bbc.co.uk/news/uk-england-manchester-36529178 [Accessed 11 May 2017].

BI. (2016). This smart trash-can startup is helping people recycle, [online] Available at: http://uk.businessinsider.com/smart-trash-can-startup-uzer-helps-people-recycle-in-france-2016-10 [Accessed 6 May 2017].

Byrne, P. (2017). New smaller bins blamed for huge rise in arson and fly tipping, Mirror, [online] p.1. Available at: http://www.mirror.co.uk/news/uk-news/new-smaller-bins-blamed-huge-9628796 [Accessed 11 May 2017].

Davies, J. (2016). Recycling around the world Spain, [Blog] Recycling Bins, Available at: https://www.recyclingbins.co.uk/blog/recycling-around-the-world-spain/ [Accessed 6 May 2017].

Fosnacht, K., Sarraf, S., Howe, E. and Peck, L. (2017). How Important are High Response Rates for College Surveys?, The Review of Higher Education, [online] 40(2), pp.245-265. Available at: https://muse.jhu.edu/article/640611/pdf [Accessed 11 May 2017].

Foucault, M. (1982). The Subject And Power, Critical Inquiry, 8(4), pp.777-795.

Fowler, F. (2014). Survey research methods. 1st ed, Los Angeles [u.a.]: Sage, pp.1-154.

Harvey, D. (1982). 'The Limits to Capital', Baltimore, MD: The Johns Hopkins University Press.

Hulme, M. (2009). 'Why we disagree about climate change: understanding controversy', Inaction and opportunity, Cambridge: Cambridge University Press

Klaiman, K., Ortega, D.L. and Garnache, C., (2017). Perceived barriers to food packaging recycling: Evidence from a choice experiment of US consumers, Food Control, 73, pp.291-299.

Kranzingher, L., Schopf, k., Pomberger, R. and Punesch, E. (2017), Case study: Is the 'catch-all-plastics bin' useful in unlocking the hidden resource potential in the residual waste collection system?, Waste Management and Research, [online] 35(2), pp.155-162. Available at: https://www.scopus.com/record/display.uri?eid=2-s2.0-85011596801&origin=resultslist&sort=plf-f&src=s&st1=recycling+bins+europe&st2=&sid=AF71FC8D42DADBCC5CC8845A3CFAC033.w snAw8kcdt7IPYLO0V48gA%3a10&sot=b&sdt=b&sl=36&s=TITLE-ABS-KEY%28recycling+bins+europe%29&relpos=1&citeCnt=1&searchTerm= [Accessed 11 May 2017].

Li, T. (2007). Governmentality, Anthropologica, 49(2), pp.275-281

Manchester: A Certain Future (MACF) (2016). Annual Report 2016, Manchester: A Certain Future, Manchester, pp.1-37.

MCCA. (2017a). Manchester Climate Change Agency, [online] Available at: http://www.manchesterclimate.com/involved/manchester-climate-change-agency [Accessed 3 May 2017].

MCCA. (2017b). Manchester Climate Change Strategy 2017-50, Manchester: MCCA, pp.1-40.

Moore, D. (2017). Manchester Approves Switch To "Slim Bins", [online] CIWM Journal Online. Available at: http://ciwm-journal.co.uk/manchester-approves-switch-slim-bins/ [Accessed 10 May 2017].

Morlok, J., Schoenberger, H., Styles, D., Galvez-Martos, J. and Zeschmar-Lahl, B. (2017). The Impact of Pay-As-You-Throw Schemes on Municipal Solid Waste Management: The Exemplar Case of the County of Aschaffenburg, Germany. Resources, 6(1), p.8.

Newman, I. and Benz, C. (2006). Qualitative-quantitative research methodology, 1st ed. Carbondale, Ill. [u.a.]: Southern Illinois Univ. Press.

Polya, D. (2016). Brexit – will the EU be greener without its 'Dirty Man of Europe'?, [Blog] Manchester Policy Blogs. Available at: http://blog.policy.manchester.ac.uk/posts/2016/07/brexit-will-the-eu-be-greener-without-its-dirty-man-of-europe/ [Accessed 3 May 2017].

Shearer, L., Gatersleben, B., Morse, S., Smyth, M. and Hunt, S. (2017). A problem unstuck? Evaluating the effectiveness of sticker prompts for encouraging household food waste recycling behaviour, Waste Management, [online] 60, pp.164-172. Available at: http://www.sciencedirect.com/science/article/pii/S0956053X16305414 [Accessed 6 May 2017].

Shipman, M. (2014). the Limitations Of Social Research, 4th ed. New York: Routledge, pp.1-158.

Taylor, D and Taylor, G. (2007).' The requirements of a sustainable planetary civilisation', social alternatives, Vol. 26#3: 10-16. Available: [Online at] www.bestfutures.org

Thomas, R. (2011). Blending qualitative & quantitative research methods in theses and dissertations, 1st ed. Thousand Oaks, Calif.: SAGE.

Wastesavers (2017). Why we sort recycling at the curbside, Newport: Wastesavers, p.1.

Williams, J. (2016). If you live in Manchester your bin is about to get a lot smaller - and this is why, Manchester Evening News, [online] p.1. Available at: http://www.manchestereveningnews.co.uk/news/greater-manchester-news/you-live-manchester-your-bin-11467856 [Accessed 3 May 2017].

Zhu, N. (2016). Impact of communication appeals on recycling behaviours among undergraduate students, MA. Purdue University.

What is your gender?

60 responses
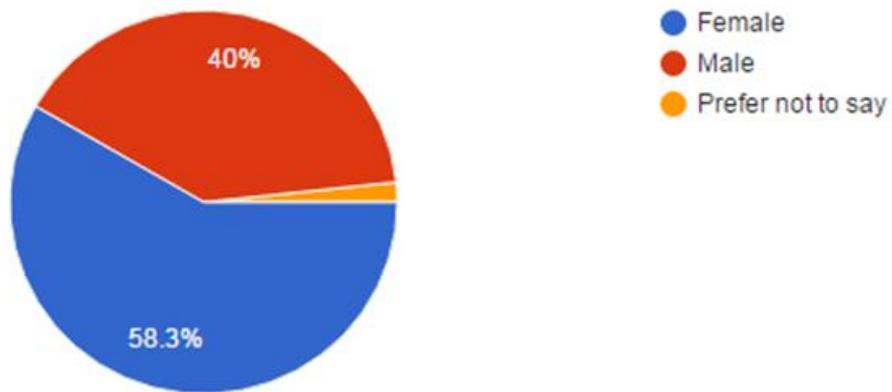
Legend:
- Female
- Male
- Prefer not to say

40%
58.3%

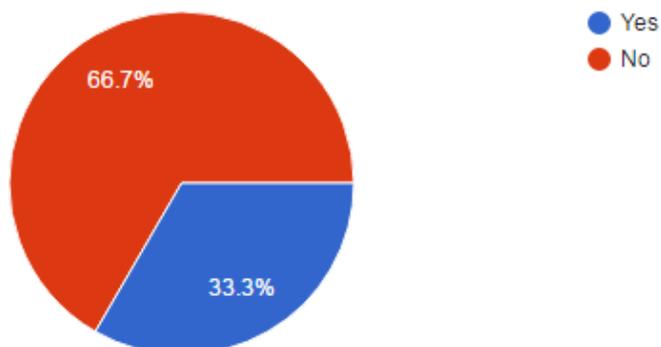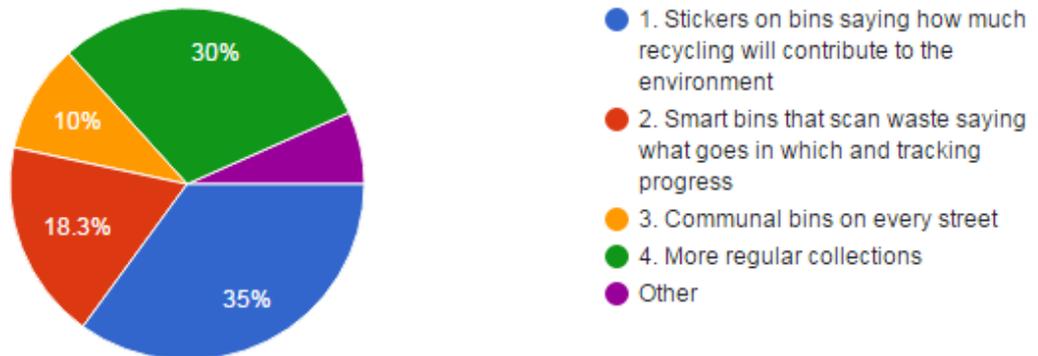## Are you aware of the new bin policy introduced in 2016, that has seen bigger recycling bins replaced with smaller ones?

60 responses

Legend:
- Yes
- No

66.7%
33.3%

If you were to design a bin policy, what solution out of the ones mentioned do you think would be the most effective?

60 responses

- 1. Stickers on bins saying how much recycling will contribute to the environment
- 2. Smart bins that scan waste saying what goes in which and tracking progress
- 3. Communal bins on every street
- 4. More regular collections
- Other

Are you aware of the new bin policy introduced in 2016, that has seen bigger recycling bins replaced with smaller ones?

60 responses

- Yes
- No