Community participation and action are important foundations of public health. The objective of this study was to identify characteristics of resident action groups in metropolitan Sydney which predict achievement of a group's objectives and higher group potency. A stratified random sample of 32 groups registered with local councils surveyed in 1997 were followed up two years later. Measures of community empowerment (assessed by the achievement of a group's objectives and higher group potency) were linked with aggregated baseline group data. Of the 32 groups that provided baseline data, 21 (66%) were still meeting two years after initial contact. Group potency was negatively associated with the mean number of activities with which groups were involved (p=0.04). A higher level of mean perceived benefits (p=0.02), and a higher ratio of benefits to cost (p=0.04) were positively associated with group potency. Success in achieving group objectives was positively associated with higher baseline group potency (p=0.03), higher baseline achievement of success (p<0.01), and higher baseline expectations of success (p=0.04). The lower the proportion of meetings attended, the more likely the group's objectives were to have been achieved (p=0.05). These findings suggest that quality of participation may be more important than amount of participation for community empowerment. A larger study is needed to better identify the inter-relationships of key aspects of participation and community empowerment.

Community participation and action are important foundations of public health (Baum, 1997) and are key principles of the Declaration of Alma-Ata and the Ottawa Charter for Health Promotion (Bracht & Tsouros, 1990). At the individual level, participation has been associated with increased personal and political efficacy (Prestby et al., 1990; Rissel et al., 1996). At the community level, participation has been associated with the strengthening of social networks and the enhancement of the community's competence to solve health problems (Wallerstein, 1992).

In urban neighbourhoods, resident action groups (RAGs) have an important role in providing a mechanism for community members to participate in a social action process to change aspects of their local area which may have a detrimental impact on social or physical health. In order for community health workers to facilitate effectively the process of participation, it is important to appreciate which individuals, under what circumstances, and in what type of activities they are more likely to be involved in community action. Yet community participation has infrequently been studied in Australia using quantitative or longitudinal research methods.

Recently, we conducted a cross-sectional survey of members of a random sample of resident action groups across Sydney (Butler, Rissel, & Khavarpour, 1999). This study identified four types of participation and factors associated with these types of participation. An increase in the hours of participation per month was associated with a decrease in the self-reported costs of participation, an increase in the self-reported benefits of participation and an increase in group potency (Butler et al., 1999). Involvement in a greater number of activities was associated with a decrease in the self-reported costs and an increase in the self-reported benefits associated with participation, increased satisfaction with group processes, a decrease in group potency and an increase in the number of members known prior to group membership. Length of group membership was positively associated with age and more positive expectations of the group's future success. An increase in the proportion of meetings attended was associated with self-reported satisfaction with group processes (Butler et al., 1999).

Empowerment theory suggests that participation in community action is an important mechanism for achieving community empowerment (Rissel, 1994). Key components of community empowerment include increased psychological empowerment or subjective sense of control, and objective "power", which can be assessed through group potency (Guzzo, Yost, Campbell, & Shea, 1993), increased resource acquisition and influence over political decisions. However, longitudinal studies have rarely been conducted, thereby preventing any possibility of confirming or discounting claims that participation contributes to community empowerment.

This study followed-up the 32 resident action groups (RAGs) which participated in our baseline cross-sectional study to assess, two years later, to what extent the groups'
goals had been achieved (increased social power of the group) and to determine levels of group potency.

Method

Baseline

A baseline survey was conducted of a random sample of RAGs in Sydney to identify the demographic and social psychological characteristics of participants and participants' perceptions of group processes, group potency, and costs and benefits of participation. A sampling frame of 150 general RAGs in the Sydney metropolitan area was compiled by contacting each council for a list of resident action groups in their local area. Single issue environmental groups were excluded due to their perceived short life-span. A stratified random sample (by Sydney geographic region) of 50 groups was selected.

Of the 246 baseline respondents, 56% were male. More than half (55%) of respondents were aged between 40 and 60 years of age and only 9% were below 40 years of age. Respondents were mostly Australian born (79%), married or in a de-facto relationship (79%) and had children (87%). Nearly two-thirds of respondents (64%) were currently employed. Of respondents not in employment, 72% were retired. One third of respondents had a gross annual income over $60,000 and over half (57%) of respondents had a university degree or diploma from TAFE or a College of Advanced Education.

Only 44% of baseline respondents felt that their RAG had much influence in getting the local area the way they want it and 48% felt that the group had been very successful in achieving its goals. Two-thirds of respondents strongly agreed with the direction of the group and 76% were satisfied with the group's progress, with 56% being highly satisfied. Over half of respondents (61%) were satisfied with the way decisions were made in the group and 55% felt that the group was very cohesive. Nearly 66% of respondents reported getting much personal satisfaction from being a group member and over two-thirds (69%) felt very clear about their role within the group. Less than half of respondents, however, felt highly involved in the group and only 36% felt that they had much influence in the group (Butler et al., 1999).

When asked about the group as a whole, less than half of baseline respondents (47.3%) reported their group felt it was productive to a great extent. Nearly two-thirds (63%) reported their group felt to a great extent that it could get a lot of work done when it works hard. Over half (58%) reported that the group expected to a great extent to have a lot of influence in the local area. Only 41% reported the group felt to a great extent that it could solve any problems it encounters (Butler et al., 1999).

Baseline information previously collected from each group included four unit-weighted scales: group potency (four items, Cronbach’s alpha=0.87) (Guzzo et al., 1993), satisfaction with group processes (seven items, Cronbach’s alpha=0.80) (Butler et al., 1999), benefits of participation (eleven items, Cronbach’s alpha=0.86) and costs of participation (nine items, Cronbach’s alpha=0.73) (Prestby et al., 1990). Cronbach’s alpha is a summary correlation measure of the extent of inter-item agreement among the items. Other baseline information collected included the mean number of months members had been part of their group; mean number of group activities members participated in; mean number of hours spent on group activities in the past month; and mean perception of recent group success and expected success. Activities was considered broadly from attendance at meetings, gathering information on community needs, lobbying and raising public awareness of issues (Butler, 1998).

Follow-up

Following an advance letter, up to 11 telephone attempts were made by a research assistant to contact each of the current chairpersons of the 32 resident action groups that provided data in the baseline study. A brief telephone interview assessed whether the group was still meeting, current characteristics (for example, size and composition) of the group, achievement of the action group's goals and degree of group potency. A three-item scale assessing group achievement was constructed from questions asking (on a scale from 0-10) the degree of lifetime success, and success in the previous two years, in achieving the group's objectives, and success in influencing important political decisions about the local area (Cronbach's alpha=0.84). Another four-item scale used previously was used to assess group potency (Butler et al., 1999). Group potency is the collective belief in a group that it can be effective (Guzzo et al., 1993), although was only asked of the chairperson in the follow-up telephone survey.

Group means were computed for baseline variables and matched with the chairperson's follow-up data. The group was the unit of analysis. Univariate logistic (for group still continuing or not) and linear regression analyses were performed to identify predictors of successful groups and groups with high group potency.

Results

Of the 32 groups which provided baseline data, five were not contactable (84% response rate). Of the remaining 27 groups, six were no longer functioning. Assuming groups not able to be contacted are no longer functioning, 66% of groups were still meeting two years after initial contact.

The two continuous dependent variables were normally distributed with the scores for group success in achieving objectives ranging from 9 to 26 (mean=19.8) and the range for group potency from 15 to 28 (mean=20.8).

None of the baseline factors were associated with whether the group continued to meet or not.

Group potency was negatively associated with the mean number of activities groups were involved in (p=0.04). A higher level of mean perceived benefits (p=0.02), and a higher ratio of benefits to cost (p=0.04) were positively associated with group potency (see Table 1).

Success in achieving group objectives was positively associated with higher baseline group potency (p=0.03), higher baseline achievement of success (p<0.01), and
higher baseline expectations of success \((p=0.04)\). The lower the proportion of meetings group members attended at baseline, the more likely the group's objectives were to have been achieved \((p=0.05)\).

### Discussion

Albeit a small project, this study is the first quantitative longitudinal study of participation in community action in Australia that has attempted to identify key predictors of successful community groups. The findings that a fewer number of activities was predictive of group potency and fewer meetings attended was predictive of achievement of group objectives were unexpected. These findings suggest that quality of participation may be more important than amount of participation for community empowerment. However, there may be a cut-off level of attendance, such that if too few meetings are attended the group's objectives may be compromised.

Consistent with our baseline cross-sectional findings \((\text{Butler, 1998})\), higher baseline perceptions of benefits from participation in the group and a higher ratio of benefits to costs were predictive of the chairperson’s belief in the group's effectiveness (group potency), although only the chairperson’s perception of the group’s potency was able to be measured at follow-up. Past success, and baseline beliefs and expectations of success were predictive of achieving a group's objectives, as might be expected from individual self-efficacy theory \((\text{Bandura, 1986})\).

The result that less frequent attendance of group members at meetings at baseline was positively associated with achievement of group objectives was somewhat surprising. This could indicate that a smaller core group of active members are more likely to achieve group objectives, or that a dynamic exchangeable membership accounted for the groups’ achievements. The baseline result that participants’ satisfaction with group processes was positively associated with higher levels of attendances suggests that satisfaction with group processes may not be sufficient to achieve group objectives, which was confirmed in the longitudinal analysis. However, satisfaction with group processes may contribute to a favourable assessment of benefits to costs.

Past and expected success in achieving group objectives was to some extent dependent on the ambitiousness of the objectives. Groups with very modest objectives (for example, the tree planting project) were more likely to be “successful” than groups that attempted major changes (for example, redirecting planned motorways) regardless of the actual level of influence attained. Better measures of group effectiveness are needed.

The lack of association between any of the variables and the continued operation of the community groups, suggest that it may be the external context and the need to form a group that influences a group's continuity, rather than internal group characteristics. However, not all internal factors, such as skill and experience levels or the degree of capacity building undertaken, were investigated and therefore cannot be discounted. The low power of the analysis due to the small sample may also have contributed to this null association. The low sample size also precluded multivariate analysis for any of the dependent variables.

Another limitation of this follow-up study is that the chairperson’s views of the group may not be representative of the whole group. Although the chairperson ought to have a good understanding of the group and its achievements, this may not always be the case, or the chairperson may wish to paint a positive image of the group by emphasising successes.

This study has identified that participation is associated with aspects of community empowerment, but not in expected directions. Perceptions of benefits from group participation continued to be important for the effectiveness of the community action groups. A larger study using structural equation modelling analysis...
techniques is recommended better to identify the inter­relationships of key aspects of participation and community empowerment. Qualitative methods would also have added useful and important insights into the processes and outcomes of the groups.

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References

Christopher Rissel
Health Promotion Unit
Central Sydney Area Health Service
Level 4, Queen Mary Building
Grose Street
Camperdown, NSW, 2050
AUSTRALIA
cris@hpu.rpa.cs.nsw.gov.au

Freidoon Khavarpour
School of Indigenous Health Studies
University of Sydney
Cumberland Campus
PO Box 170
Lidcombe, NSW, 1825
AUSTRALIA

Catherine Butler
Multicultural Health Unit
Northern Sydney Area Health Service
North Sydney, NSW, 2060
AUSTRALIA

Correspondence to Christopher Rissel