Natural England Commissioned Report NECR076

Promoting Green Space in Stoke-on-Trent (ProGreSS)

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NATURAL ENGLAND

Foreword

Natural England commission a range of reports from external contractors to provide evidence and advice to assist us in delivering our duties. The views in this report are those of the authors and do not necessarily represent those of Natural England.

Background

Natural England commissioned this research in January 2008 to explore peoples engagement with green spaces and how to most effectively encourage connection with nature in Urban greenspace. This piece of research links into natural England's Outcome 2; People are inspired to value and conserve the Natural environment. More people are inspired to enjoy, understand and act for the natural environment. Recent work has highlighted the public health importance of local and neighbourhood (or doorstep) green space in deprived urban areas; those areas in which health and social need are often greatest, but where green space tends to be of poor quality and under-used.

This 18 month project used local partnership working to promote and improve neighbourhood green space in a deprived urban community in Stoke-on-Trent. An effective collaboration between Staffordshire University, Groundwork and other local agencies enabled levering in further investment thereby increasing the original budget.

A four part pre-post evaluation involved collection of qualitative and quantitative data: postal surveys, focus group interviews, a green space audit, observed levels of green space use and the testing of interventions.

The neighbourhood area and park proved challenging environments in terms of community engagement which was confirmed through interviews and focus groups. Low social capital remains a key barrier to community involvement with such projects , despite residents identifying the need.

The development of social capital through community engagement in the green space area of intervention relates directly to wellbeing improvement.

In researching the interactions of local people with their local neighbourhood urban greenspace, the project provided valuable evidence of the need for further investment in the area.

The lasting value of this work in raising the profile of need and helping address it should become more apparent over time if the evidence gathered is used to further the case for investment.

Natural England will use this evidence and the experience from this initiative to inform our advice to others and shape delivery through Civil Society and local community partnerships wishing to improve the opportunities to engage with the natural environment.

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Further information
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EXECUTIVE SUMMARY

Recent work has highlighted the public health importance of local and neighbourhood (or *doorstep*) green space in deprived urban areas; those areas in which health and social need are often greatest, but where green space tends to be of poor quality and under-used.

This 18-month project used local partnership working to promote and improve neighbourhood green space in a deprived urban community in Stoke-on-Trent. An effective collaboration between Staffordshire University, Groundwork and other local agencies enabled levering in further investment, **increasing the original budget by 75%**.

A four-part pre-post evaluation involved collection of qualitative and quantitative data: postal survey, informal and formal consultation with local adults and youth (focus groups and interviews), direct observation of park use, and an audit of green space quality. Baseline data and continued consultation were used to inform intervention activities to increase local residents' use of a 4.6 hectare neighbourhood park.

Baseline data revealed that: local residents valued living near green space, but had generally negative perceptions of the park; the park served primarily as a shortcut to walk through, not an area to visit for recreation; major barriers to use were fear of antisocial behaviour and inadequate facilities.

Working with the Police, local schools and resident groups, the Area Implementation Team (AIT) and Youth Services, a 12-month intervention was implemented. This involved a programme of child/parent and youth activities, introduction of a natural play area, and additional improvements to a coppice area to improve visibility and site quality.

These intervention activities were generally well received, with some notable successes. Data collected at 12 months revealed:

- Overall perceptions of the park were better at follow-up respondents than baseline;
- Perceptions of antisocial behaviour in the neighbourhood area were significantly lower, reflecting a real reduction in reported antisocial behaviour in the neighbourhood area and park;
- Most residents who used the park saw the site changes as an improvement;

- Direct observations did not reveal changes in the nature of use at the time of follow-up data collection, but the audit scores reflected a quality improvement. A longer follow-up period might have enabled some of the positive perceptions to manifest as behaviour change.

The neighbourhood area and park were challenging environments in terms of community engagement confirmed through interviews and focus groups with stakeholders (engaged local residents, Police and Groundwork community workers). Low social capital remains a key barrier to community involvement with such projects, despite residents identifying the need.

The project provided valuable evidence of the need for further investment in the area. Additional measures were taken to promote sustainable improvements beyond the project. For example, meetings between a local Youth Forum and adult residents were arranged to promote inter-generational dialogue, with proactive residents; continued efforts by Groundwork to fund further child/youth activities in the park; baseline data used to make a case for introducing further lighting (in 2011).

The lasting value of this work in raising the profile of need and helping to address it should become more apparent over time *if* the evidence gathered is used to further the case for investment.

Overall, the project achieved notable successes on a modest budget, working in partnership with local agencies to address local problems. As part of a collaborative effort involving the Police, the AIT, Youth Services and some local residents, the ProGreSS project and associated evaluation has documented improvements in perceptions of the park, a reduction in anti-social behaviour and some changes in resident attitudes toward local youth.

CONTENTS

1. INTRODUCTION

'England's natural green space... provides an opportunity to improve health and reduce rates of 21st Century diseases. Used in the right way, it represents our Natural Health Service: a treatment which is cost effective and free at the point of delivery.'[6] (p.2)

1.1 BACKGROUND

1.1.1 Urban green space

Urban green space is increasingly valued for social, economic and environmental benefits and the potential for improving public health, community well-being and quality of life.[2 3] With the public health shift towards prevention, rather than treatment,[4] and growing understanding that *health* includes physical, mental and social well-being,[5] focus has increasingly turned to the environment and how the areas in which we live and interact can influence our health. Quality green space is widely regarded as a key feature of health promoting neighbourhood environments.[2 6 7]

There is evidence linking urban green space with a range of positive health outcomes such as increased physical activity, improved mental health, social well-being[2 6] and longevity.[8] The benefits of safe, attractive and functional green space in communities include not only the direct benefits of providing a place for physical activity,[9] but also those conferred through "passive" use; i.e., psychological and social benefits of people engaging with nature and the social interactions that take place between people using green space.[10 11] Parks can also provide communities with the space and opportunity for social interaction. Attractive neighborhood greens have been shown to promote informal social interaction, strengthening social ties or *social capital,*[2 12 13] which in turn, is conducive to better health.[14-16]

These positive health effects maybe strongest in more deprived urban areas.[17-19] Mitchell and Popham[19] linked green space exposure with levels of health inequality. Frumkin[20] named green space as one of five *arenas* in which 'environmental justice and the built environment intersect to affect the health of poor people and people of colour'[20] (p.A291). In light of evidence from Mitchell and Popham[19] and the marked in socio-economic and ethnic inequalities in the quality green space provision in England,[21] such provision represents a means of tackling health and environmental inequalities.

1.1.2 Inequalities in urban green space

In the UK, public parks have been a key feature of urban areas for decades. It has been estimated that over 90 per cent of the general public think that parks and open spaces improve their quality of life,[22] even in deprived inner-city areas.[21]

> *'People living in deprived urban areas recognise and appreciate the value of local green spaces, but they underuse the spaces that are most convenient because these spaces are often poor quality and feel unsafe'.*[21]

As detailed in 1.1.1, the health benefits of green space access appear strongest in more urban and deprived areas, where health need tends to be greatest.[17-19] Following a decline in green space quality in many areas of the country, recent work has suggested that although this trend has been arrested, inequality in provision remains.[23] CABE's *Urban Green Nation* report[23] used national data at ward level to explore inequality in access to quality green space, reporting a five-fold difference between the most affluent 20 *per cent* and most deprived 10 *per cent* of areas. Generally positive trends have not, therefore, produced equitable benefits.[23]

In recent years a growing body of cross-sectional evidence has linked *access* to green space with health and other positive outcomes.[8 17-19] Far less evidence specifically implicates *use*. The spurious assumption that access equates to use, and the need to consider green space quality is confirmed by recent evidence that: (i) use is dependent on quality – if people value their local green space and feel safe in it, they use it more and are more physically active; (ii) people who perceive green space quality to be good, tend to be more satisfied with their neighbourhood and have better health and wellbeing.[21]

The *vicious cycle* of poor quality and low levels of use in deprived urban communities observed was evident in the present project and elsewhere. Lack of use, neglect and poor maintenance of areas can mean that such community spaces become focal points for anti-social or negative behaviours. *Broken windows theory*[24] posits that the state of the environment shapes the behaviour of those within. In the context of green space, poor maintenance and evidence of neglect such as litter, graffiti or vandalism, will breed further disuse of the area and anti-social behaviour not only deterring others from using the space, but having a detrimental impact on community satisfaction and well-being.[25-28]

> *'...well-used residential spaces are key to the development of neighbourhood social ties and the discouragement of potential perpetrators because they provide opportunities for informal social contact among neighbours and introduce informal surveillance.'*[10] *(p.152)*

Moreover, the lack of people using an area reduces the potential for *informal* or *natural surveillance*. For example, the creation of well-used communal areas in high rise estates in America reduced crime and increased community safety through increasing the number of people in the area and the positive social interactions between them.[10] Conversely, the combination of poorly maintained, neglected sites that lack regular visitors are more likely to result in a cycle of misuse and antisocial behaviour.

A survey of community groups highlighted that almost one-third of public parks were estimated to suffer from unacceptably high levels of vandalism and behaviour related problems; around 60 *per cent* of local authorities were considered to have limited or no success in tackling the problem.[29] Such perceptions have serious implications for efforts to promote local and neighbourhood green space in communities with antisocial behaviour problems (perceived or real).

1.1.3 Green space in deprived urban communities

The evidence described provides a strong rationale for efforts to maximise use and associated benefits of green space in priority areas. Consistent themes emerging from recent work indicate that despite the value people in deprived communities associate with local parks, perceptions are negative. Antisocial behaviour and safety appear the most common concern, with a frequently perceived lack of facilities for kids and young people.[21]

Parks often provide venues where different groups of young people can to congregate 'away from the adult gaze'.[30] As confirmed in the present project, the resulting perception of antisocial behavior by local adults can be inconsistent with that of the young people. An Audit Commission report[31] identified that just two per cent of young people believe that their behaviour is antisocial; eight out of 10 reported 'hanging around to socialise', 'keeping safe' and 'cheaply'. Indeed, young people were also concerned about being *victims* of anti-social behaviour.

From public health, social and environment justice perspectives, green space should be a resource that serves the whole community. Yet such concerns and perceptions can create tension and ownership issues between different sections of the community. Therefore, both real and perceived antisocial behaviour are a primary concern in such areas and central to projects such as this, that aim to promote urban green space in deprived areas.

1.1.4 Local parks and green spaces

Recent research has revealed a number of important findings in relation to local and neighbourhood (or doorstep) green space[21]. First, people invariably value green space, even in deprived urban areas where provision and perceptions tend to be poor. Second, neighbourhood and local parks are most relevant. Compared with larger more established, often district or sub regional parks, green spaces on peoples' doorstep arguably have most potential for influencing their behaviour. Yet these areas are often perceived as neglected and inadequately equipped. This move to *doorstep* green space is reaffirmed in *Nature Nearby*, which calls for quality as well as accessible local/neighbourhood green space.[32]

> *'... the availability of small green spaces on the doorstep are of crucial importance, especially for less mobile people and young children.'*[33](p.113)

Local parks and green space in deprived urban communities can typify local area characteristics and greatly influence peoples overall impressions of the neighbourhood.[23] A deprived neglected area is likely to have poorly maintained green space with inadequate facilities, which deter use, promote anti-social behaviour and perpetuate negative perceptions of the site and neighbourhood. Satisfaction with green space has emerged as a marker for satisfactions with the local authority or council.[23]

This presents both a challenge and an opportunity. Although often a source of negative behaviour perceptions, parks and green space also offer a focus for intervention efforts to improve opinions of the neighbourhood and influence community well-being and social capital through encouraging positive interactions between different sections of the community in a shared space.[21]

1.1.5 Green space accessibility

The focus on *doorstep* green space highlights the importance of accessibility.[23] [32] Regardless of quality, a site is unlikely to be well used if not widely accessible, and proximity to green space has been shown to have independent benefits for health.[17] [18] On the surface accessibility should be one of the easiest aspects of green space to measure using Geographical Information Systems (GIS). Such objective determination of proximity (as a proxy for accessibility) will, however, depend of use of street or pedestrian networks and whether data take into account the position of park access points. Perceived accessibility is also likely to vary between individuals (e.g., with age, mobility, familiarity with the local area).

Box 1. Accessible Natural Green Space Standards[1]

- No person should live more than 300m from natural green space of at least 2 hectares
- Provision of at least 1ha of Local Nature Reserve per 1,000 population;
- There should be at least one accessible 20ha site within 2km from home;
- There should be one accessible 100ha site within 5km;
- There should be one accessible 500ha site within 10km.

Accessible Natural Green Space Standards (ANGSt),[1] devised in the mid-1990s and revised in 2002 and 2010,[32] provided a benchmark for minimal availability of green space for households to help local authorities work towards providing accessible green space for the English population.

This recommends that everyone live within 300 metres of an area of natural green space of at least two hectares (approximately the size of two football pitches). This criterion was central to the present project in which 300m was used to demark the effective catchment area for local and neighbourhood green space. The aim, to use partnership working and community engagement to promote effective use of neighbourhood green space to engender benefits for community health and social well being of people within this *catchment area*.

> *'... in the majority of cases people's contact with nature takes place in local neighbourhoods– a village common, the local park, the scrap of land at the bottom of the street. And these places should be no less special than 'official' sites.'*[32]*(p.4)*

1.1.6 Green space quality

Finally, use and subsequent health and social benefits are largely dependent on a green space being perceived as of sufficient quality.[23] Quality is fundamental as both a problem and potential solution to maximising deprived urban green space. Quality judgement is inherently subjective and made difficult by the variability in green space size, typology (e.g., nature reserve, formal park), purpose, level of access (e.g., restricted, school fields) and the various criteria on which judgements can be based.

> *'A small, well-designed and well-maintained park may be far more valuable to a community than a large but neglected space.'[23] (p.15)*

The result is a range of methods of quality assessment, varying in construction, purpose, and complexity. A search for existing tools summarised in Table 1.1, although is not exhaustive, highlights the diversity in composition and application. They range from very comprehensive tools that capture a large number of components to more simple scoring measures for recreational areas. The Green Flag award criteria and assessment tools were developed to move towards consensus on quality standards and measurement.[34] This comprises a tool for field assessment and one for completion by those responsible for management, marketing and so on. As such, it is less conducive for use by an external observer; i.e., someone without knowledge of the management, but can on inspection, make judgements about the quality based on appearance, maintenance and the presence and quality various facilities or amenities, which could, in turn, be used to make judgements about functionality and ways to promote use through quality improvements.

For the purposes of the present study, an existing tool was adapted for use in small neighbourhood and local green spaces in urban areas. The audit tool originally developed by Foster et al.[35] for the Commission for Architecture and the Built Environment (CABE) was used as the template. It was developed in the UK through a rigorous process involving focus groups and user surveys in five large parks in Norwich, with a focus on attracting people into parks for recreational physical activity. Pilot work and themes from the focus groups (and survey data) were used to modify the tool to facilitate simple scoring of local and neighbourhood (or *doorstep*) green space. This was necessary given the different expectations and functions of the larger parks in which the original tool was developed.

Table 1.1 Summary of some existing green space audit tools

Instrument	Main aim	Items	Domains
Quality of Urban Green Space Assessment Tool[35]	Assessment of urban green space quality with the capability of capturing aspects of green space that may be associated with the likelihood of engaging in **physical activity**	69 items	Access, Recreation facilities, Amenities, landscape character, maintenance, signs/notices/lighting, Usage, Overall
Physical Activity Resource Assessment (PARA)[36]	Assess all publicly available **physical activity** resources (13 urban, lower income, high ethnic minority areas vs 4 high income, lower ethnic minority neighbourhoods)	49 questions (one page).	Features, Incivilities, Size, Cost, Signage, Amenities
Bedimo-Rung Assessment Tools (BRAT) – direct observation (BRAT-DO)[37]	To measure the physical, social, and policy environments of parks	95 questions (181 items)	Features, Condition, Access, Aesthetics, Safety. Also considers *Activity Areas, Supporting Areas, Surrounding Neighbourhood*
Environmental Assessment of Public Recreation Spaces (EAPRS)[38]	Characterise the physical environments within public parks and playgrounds (**comprehensive** instrument)	646 items	Trails and paths, Water areas, Access, Aesthetics, Comfort facilities, Information, Educational, Specific areas, Safety-related, Seating, Play equipment, Play areas, Athletic areas
Quality of Public Open Space Tool (POST)[39]	Auditing public open spaces such as parks and ovals, with particular emphasis on the physical attributes that may either encourage or discourage their use for **physical activity**	42 items	Activities, Environmental quality, Amenities, Safety
Recreation Facility Evaluation Tool[40]	To assess the quality of public recreational facilities/amenity – includes Parks, Playgrounds, Sports Fields, Aquatic Facilities/Pools, and Recreation Centres.	61 items	Safety, Condition, Maintenance
Public Parks Assessment (PPA)[41]	Questionnaire for **local authorities** to gather information on number of parks, condition, and annual revenue expenditure	16 main items, with sub-items for some	Approx. half items aimed at Local Authority's maintenance.
Green Flag[34 42] (Field Research Tool)	To encourage the provision of good quality public parks and green spaces, and **management** in environmentally sustainable ways	27 scoring criteria, 8 domains	Welcoming place, Healthy/safe/secure, Maintenance of equipment, buildings & landscape, Litter/cleanliness/ vandalism, Environmental sustainability, Conservation of heritage & nature, Community involvement, Marketing strategy, Overall management
Spaceshaper[43]	Workshop-based toolkit with the flexibility to be adapted to local circumstances, involving a trained Spaceshaper facilitator, to advise and run the workshop with interested people	41 characteristics, 8 domains	Access, Use, Other people, Maintenance, Environment, Design and appearance, Community, You

1.2 CONTEXT

The setting for the proposed project was Stoke-on-Trent, a city that falls within the 10% of most disadvantaged districts nationally,[44] with some of the highest rates of morbidity/mortality[45] and physical *inactivity*[46] in the country. Despite this widespread deprivation and poor health, over one-third of the city is green open space. The amount of unrestricted green space per head of population is well above the national average (6.6 hectares per 1000 population).[47] According to the hierarchy of parks in Stoke-on-Trent, two are classified as sub-regional, 10 are district, with approximately **36 neighbourhood parks** and **41 local parks**.

Consistent with the recent theme advocating better use of smaller doorstep green space for health and community well-being,[21 32 48] the latter two categories hold the most promise for improving the lives of residents in deprived urban communities. Not only are local and neighbourhood parks abundant and thus readily accessible to the majority of Stoke-on-Trent residents, but such smaller sites tend not to attract available investment in green space. As a consequence, they often lack the facilities that might encourage use by the local population. Stoke-on-Trent is, therefore, an ideal location to develop our understanding of how to promote effective use of green space in deprived urban communities.

1.3 AIMS AND OBJECTIVES

This project was a collaboration between Staffordshire University (SU) and Groundwork Stoke-on-Trent & Staffordshire (GW), with critical input from the community and other local partners. The overarching project aim was to increase effective use of a neighbourhood park in a deprived urban community in Stoke-on-Trent. To meet this aim, a number of key objectives were identified:

i. Audit the quality, functionality and accessibility of neighbourhood and local green space;
ii. Identify an appropriate neighbourhood or local green space for intervention;
iii. Collect baseline data to explore use and perceptions of green space, and relevant barriers and motivations to using neighbourhood green space in a deprived urban community;
iv. Use a number of evaluative methods to explore the effectiveness of interventions to improve use and perceptions of local green space.

The well-established main project partnership between GW and SU was intended to combine expertise in evaluation with effective community working, building on a Staffordshire University investigation* of neighbourhood environments in relation to health and physical activity of Stoke-on-Trent residents.[14 49 50] To achieve the project aims on a modest project budget demanded working in partnership with local agencies and securing further funding to work towards effecting sustainable differences in a challenging environment.

* Project website: http://www.staffs.ac.uk/schools/health/ihr/cser/pabh/currentresearch/mrcproject/

2. STUDY DESIGN

The project involved a 12-month intervention. This was informed and evaluated using a range of evaluative methods, and ongoing community consultation, with the overarching aim of increasing local residents' engagement with existing green space in a deprived urban community. This collaborative approach was contingent on collaborative working between Staffordshire University (SU), Groundwork (GW) Stoke-on-Trent and Staffordshire, the neighbourhood Area Implementation Team (AIT), Youth Services, residents and other local partners (e.g., schools, Police).

Staffordshire University were primarily responsible for project design, evaluation and overall project management. Groundwork were responsible for community consultation and intervention design and delivery. The overall approach was informed by the Social Marketing[51] principle that, as far as possible, the intervention activities were guided by baseline community consultation.

The impact of interventions was evaluated using a four-component approach:

i. Survey of green space use, perceptions, physical activity and related outcomes
ii. Focus groups to explore the perceptions, experiences, barriers and motivations for green space use, and inform the development of interventions
iii. Direct observation of green space use
iv. Audit of green space quality

Key to this approach was data gathering on both self-reported and objective *use*, and the inclusion of both quantitative and extensive qualitative data to understand local issues, and the relative success in addressing them. This was a single site pre-post study design. The original intention was to implement a controlled study design, comparing changes in use and perceptions in the study area against those in a matched control site. The need to combine detailed evaluation whilst dedicating sufficient resource to support a worthwhile intervention was a challenge that required securing of additional funding and some compromises on study design.

2.1 SELECTION OF STUDY AREAS AND GREEN SPACE

2.1.1 Study area

The project focus was neighbourhood and local parks with unrestricted access. Using data from the 2005 audit of North Staffordshire green space,[47] GIS was used to identify boundaries of green space areas and key classifications:

- General typology: e.g., park, outdoor sports, semi-natural, agriculture
- Primary purpose: biodiversity, formal recreation, informal recreation, landscape and visual, operational and redundant
- Secondary purpose: as above
- Access level: unrestricted, limited or restricted.

For consistency with the ANGSt criterion, the intervention park had to be:

- Local or neighbourhood green space (according to the Stoke-on-Trent green space hierarchy)
- ≥2 hectares
- Unrestricted public access
- Formal or informal recreation as the primary or secondary purpose
- Within 300m of a designated *intervention area* from the previous SU project[†]

Green spaces meeting these criteria for two potential areas were mapped. Subsequent site visits identified several green space areas that served residents from two *intervention areas*, both falling within the most deprived 30% of national deprivation rankings.[52] Provisional plans were to target green space in two areas. Challenges of engaging with the local community meant delimiting to a single site (Section 7.3).

2.1.2 Study site

On the basis of preliminary work and consultation with local residents, a neighbourhood park, which will be referred to as IntPark (InterventionPark), (Figures 2.2), was identified as the site of the project for a number of reasons:

- Focus group participants identified this park as the most appropriate target for intervention activities due to its location and accessibility

[†] Project website: http://www.staffs.ac.uk/schools/health/ihr/cser/pabh/currentresearch/mrcproject/

- It is surrounded by houses with numerous access points
- It is adjacent to the local primary school to facilitate engagement with local parents and children
- It provides a pedestrian short cut to the local town centre (approx. 10-15 minute walk)
- It has some facility provision, but was perceived to be in need of improvement.
- Borders two wards areas and falls within the catchment area of the local secondary school and so has historically been used as a central congregating point for local teenagers from several nearby communities.

The park and its main features are shown (Figure 2.1). It is a 4.6 hectare site that comprised mostly mown grass, with a dense coppice, five major access points connected by concrete footpaths, and three benches. The existing play facilities included: multi-use hard court (5-a-side football pitch/basket ball court), with concrete surface and caged sides (known locally as *the cage*); children's play area comprised one broken roundabout and one slide; basketball hoop; spinning poles; grass football pitch (with football posts during term time) used by the school for PE lessons. The general disrepair and poor provision was confirmed by baseline data collection (4.3 and 4.4).

Figure 2.1 Aerial photography and key features of intervention site

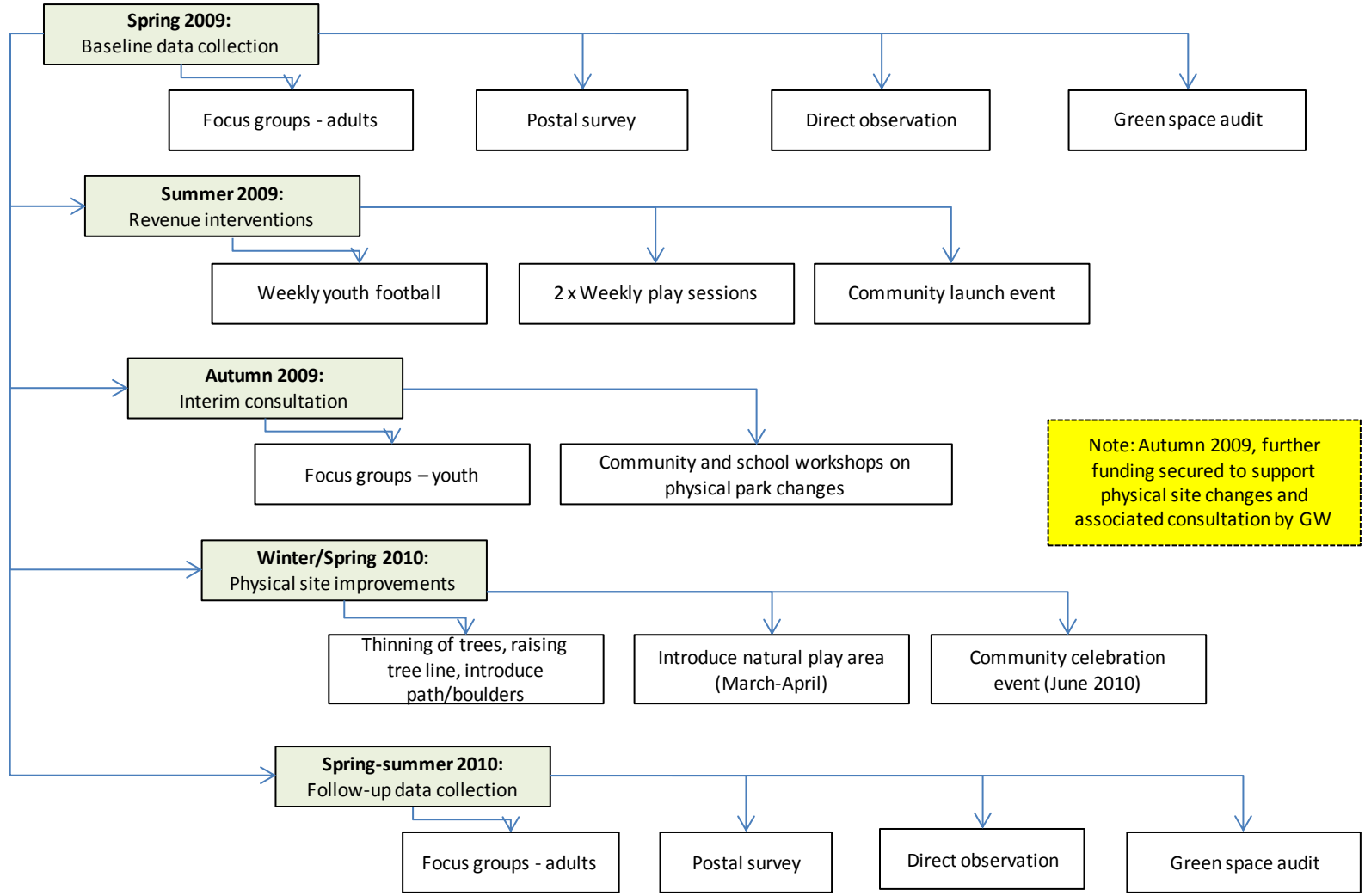


Figure 2.2 Chronology of key project stages

3. EVALUATION METHODS

This section details the design, development (where applicable) and application data collection methods at baseline (pre-) and 12 months (post-intervention). The combination of data collection approaches was necessary to maximise input from local people, essential for community[53] and youth focused interventions,[31] in addition to more *objective* data on use and quality. The four part evaluation is described, the approximate timing of which is illustrates in Figure 2.2.

3.1 POSTAL SURVEY

3.1.1 Sample and procedures

A postal survey was conducted pre and post-intervention to monitor changes in a range of variables related to use and perceptions of IntPark, with additional health, physical activity and social capital measures.

The survey was distributed by post to all households within 300m of the park identified using GIS methods detailed elsewhere.[49] Briefly, access points to the green space were mapped using on-screen digitising from aerial photography and site visits. Distances along the pedestrian network from all residential addresses (within a 1km buffer) to each park access point buffer were calculated; address data were available from the small-user version of the Postcode Address File. The resulting origin-destination table was interrogated to identify those households *within a 300m walk* of an access point giving a potential sample of 1083 households. Exclusions (n=8) were later made for derelict, empty or boarded up houses, and misclassified non-residential addresses, giving a total target sample of 1075 households.

Two copies of the survey were distributed to each residential address with instructions for *all adult* occupants (≥16 yr) to complete the survey with further copies available on request. Each address was given a unique numeric identifier to protect respondent anonymity, whilst enabling data to be linked to households retrospectively for delivery of incentives (prize draw winner) and to explore the geographical distribution of respondents.

At baseline respondents had the option of completing hard copies with freepost return, or completion/submission online (web link provided on the survey front page). Due to the poor response at baseline (n=4), the online option was not used at follow-up and. Following the initial

mailing, reminders were distributed. Participation was incentivised by entry into a prize draw for a £100 voucher for the local shopping centre.

3.1.2 Survey tool

The survey comprised six sections covering relevant topics (Table 3.1). As the composite questionnaires were mostly existing and/or pre-validated or measures, cognitive interviewing to establish respondent meaning and interpretation of questions was not undertaken.

Table 3.1 Survey composition

Section		Description	Source
A	Visiting IntPark	8 items on frequency, visiting alone/with others, and use of park	Natural England
B	About IntPark	12 items on satisfaction with design/ appearance, access, maintenance , "naturalness", facilities, incivilities, crime 3 items on intervention activities (follow-up only)	Natural England
C	Local area and community (social capital)	14 items on contact with neighbours, neighbours, public transport, access to services, anti-social behaviour, civic participation	Health Survey for England 2002 Condensed Social Capital module[54]
D	Physical activity	1 item on physical activity levels 1 item on readiness to be a physically active at recommended levels (Transtheoretical Model)	Milton et al.[55] Cancer Prevention Research Centre[56]
E	General health	SF-12v2 generic health questionnaire (physical and mental health scores)	Quality Metrics[57]
F	Household information	10 items on demographics, household composition, dog ownership, marital status, years lived in the area	Various
Sections excluded at follow-up		Mood: Positive and negative affect scores (PANAS)	

The survey was first piloted trough distribution to a small number of adults from outside the study area (n=8), who were followed up individually and asked to provide feedback on potential issues in completing and understanding the survey. Subsequent minor amendments related to the flow of questions or wording. A second pilot phase was used to gain further appreciation of ease of completion and likely response rate in deprived urban areas of the city. Fifty-six households in an adjacent neighbourhood were sent the survey (2 per household), with 7 completed surveys returned

(12.5%). Such a low response is not uncommon for postal surveys in the city (e.g., *My Health Matters*)[‡] and the inclusion of the reminder notices for the survey proper were included.[§]

Further amendments were exclusions of items from Sections A and B on green space use and perceptions. These questions, provided by Natural England, were developed in line with the GreenStat online survey of parks by Greenspace, for use in an unpublished Natural England project in London parks. Excluded items were poorly completed and/or deemed to add little value in the present context.

3.2 DIRECT OBSERVATION

3.2.1 Observation approach

To augment self-reported survey data, direct observation provided a more *objective* record of use that was less susceptible to the poor response and bias (e.g., selection, recall and social desirability biases).

Protocols were informed by two existing approaches: the System for Observing Play and Recreation in Communities (SOPARC)[58] developed in America to monitor physical activity in recreational areas; the approach used by UK consultants in green space observations.[**]

Briefly, SOPARC is based on '*momentary time sampling techniques in which periodic scans of individuals and contextual factors within pre-determined target areas in parks are made. During a scan the activity of each individual is mechanically or electronically coded as Sedentary (i.e., lying down, sitting, or standing), Walking, or Very Active. Separate scans are made for females and males, and for estimating the age and ethnic groupings of* participants'[58](p.2). Following expert consultation[**] some of the SOPARC user categories (e.g., demographics, activity type) and observation timings were adapted for use in UK local and neighbourhood parks (Table 3.2).

[‡] My Health Matters website: http://www.myhealthmatters.org/Welcome.html
[§] Available resources prevented further mailings to boost the response.
[**] Dr Alison Millward, Director of Alison Millward Associates Ltd, environmental consultant.

Table 3.2 Comparison of SOPARC and ProGreSS protocols

	SOPARC	ProGreSS
Procedures		
Days of recording	Saturday and Sunday 2 weekdays	Saturday or Sunday 2 weekdays
Times for observation (light permitting)	4x1hr periods: 7:30-8:30 11:30-12:30 15:30-16:30 18:30-19:30	4x1hr periods: 8:00-9:00 12:00-13:00 15:00-16:00 18:00-19:00
Sampling	Target area: observations made in designated ***Target Areas*** that represent all standard locations likely to provide opportunities for park users to be physically active. Series of periodic scans: 1 per 30 minutes at different sites of park (i.e., 1 or 2 scans per site per hour)	Observation area: select location that provides best view of whole area and maximum number of access points. Count all park users entering park within the recording period
Data fields		
Users/visitors	All as function of primary and secondary activity, and then gender	Record all users, and classify activity of those users
Observers	2 *independent* observers	2 observers, reaching *consensus* on questionable classifications
Categories	Age group: child, teen, adult, senior Ethnicity: Black, White, Hispanic, other Activity level: sedentary, walking, vigorous	Gender: male, female, baby (push chair – gender unknown) Age group: baby (push chair), child (up to primary school age ≤11 yr), teen (secondary school age ≤16 yr); young adult (17-40 yr), middle-aged (approx. 40-65y), older (retirement age) Ethnicity: White, Black, Asian, Mixed, Chinese Other Status: alone or with others Dog vs. no dog Primary activity: Walking through, dog walking, sport/ball sports, play/use of play equipment, cycling/jogging, sitting, socialising, negative behaviour (e.g., drinking, use of mopeds in park) Secondary: as above Primary activity intensity: sedentary, walking, low, moderate/vigorous.

In addition to IntPark, a similar neighbourhood green space site (2.4 hectares, adjacent to primary school) was included in the baseline observations to provide some validation that protocols provided a reasonable estimate of patterns of use and primary function. This enabled development of the various categories for user classifications (e.g., meaningful age groups, activity types) and the capture of data that would complement survey data. Table 3.2 summarises the ProGreSS protocols compared with SOPARC.

3.2.2 Procedures

Visits to one additional neighbourhood park were used to develop protocols (Section 3.2.4). The categories shown in Table 3.2 were judged to capture most relevant activities for the small neighbourhood park, but could be adapted for broader use if necessary. Justification for the procedures outlined in Table 3.2 is summarised.

- Zoning: For use in small local and neighbourhood parks in the UK, the present focus and topic of growing interest,[21 48] the ability to divide the park into zones was deemed unnecessary and not feasible within the available time/resource.

- Timing of observations: The four one-hour periods used in SOPARC were amended to correspond with timings of the typical working day in the UK, capturing typical commuting, lunch and school times for weekdays. Ideally, additional later evening observations could capture frequently cited anti-social behaviour problems. Implications for observer safety and adequate lighting of the area to enable observations are, however, likely to be prohibitive.

- Inclusive observations: All people entering the park were eligible to be counted, rather than using periodic scans. Low levels of use (relative to larger sites) for many local or neighbourhood green spaces mean that it should be possible to capture *all* users. In some cases scans could provide too few data points to give a useful impression of visitors type or activities. This is likely to depend on the size of the IntParknd levels of use, but was possible for present purposes and should be feasible for most small *doorstep* green space.

- Observer consensus: Two observers reached consensus, rather than independent assessment. Discussion and consensus was deemed appropriate for the present purposes of protocol development involving a small number of researchers (with limited resource), whilst maximising consistency to provide useful data. As detailed in 3.2.3, there were some efforts to establish reliability with subsequent amendments to protocols. Moreover, the proximity of IntPark and the pilot site to primary schools resulted in a large throughput of children/parents walking at certain times. This demanded two observers, one to observe and one to record data.

3.2.3 Data collected

The original intention was for SU and GW staff to train local residents to collect data at baseline and periodically throughout the intervention period. Problems with community engagement (Section 7.3) made this impractical and the need for consistency and data quality meant that SU researchers collected all observation data. Using local residents for observation would be preferable. Although used for green space audits,[23] the greater burden of observation protocols may make them less amenable to community data collection. This warrants exploration given the potential benefits of increasing data collection capacity, whilst engaging the community with their local green space, promoting ownership, and addressing negative perceptions.

3.2.4 Protocol pilot

Observations undertaken at the matched site did use independent observations by two observers. Data offered a brief check of reliability of classifications. Table 3.3 shows data for 10 one-hour observation periods: two complete weekdays (4x1 hour on 2 days) and two one-hour periods on a weekend day. This summarises the between-observer difference in total observations and the percent of users classified in different categories. The similarity in total user numbers is encouraging, but would likely depend on levels of use, which were low in this case enabling all users to be captured.

Some discrepancies in user categories were observed for age, status (alone or with others), walking through versus dog walking (as primary activity), and walking versus low intensity (as intensity of primary activity). Consequently a number of factors were considered in data recording and processing:

- Age: any doubt over age group was discussed and reconciled during observations
- Status: user classified as *alone* or *group* according to status on entrance to park
- Dog: all users (individual or group) classified as *with dog* if one member of the group is dog walking
- Primary activity: if individual or group users have a dog, primary activity is classified as *dog walking*, even if walking through park with the dog; only exceptions would be children of parents walking the dog whilst taking them children to play at the park
- Intensity: classified as *walking* (not low intensity) if primary activity is *walking through* or *dog walking*.

Although more objective than self-reported use (survey data), classifying users, for example by age or activity intensity, is inherently subjective. The protocols described require further work to test the reliability in a larger number of neighbourhood green spaces with a number of different observers.

Table 3.3 Comparison of direct observation by two independent observers

		Weekday (mean)		Weekend day (mean)		Difference (Obs1-Obs2)	
		Obs1	Obs2	Obs1	Obs2	Weekday	Weekend day
Number of users recorded*		260	258	68	67	2	1
Gender							
	Male	52.5	51.7	67.0	71.2	0.8	-4.2
	Female	46.2	36.3	31.6	34.7	9.8	-3.2
	(Baby)	1.3	1.4	1.4	0.0	-0.1	1.4
Children							
	Children	12.1	5.6	3.5	0.0	6.5	3.5
	Teenagers	27.2	16.2	22.3	16.7	11.0	5.6
	All	39.3	21.8	25.7	16.7	17.5	9.1
Adults							
	Young adults	33.0	38.2	30.6	25.8	-5.2	4.8
	Middle-age	17.6	30.4	33.9	37.6	-12.8	-3.7
	Older	8.8	8.3	8.3	19.9	0.5	-11.6
	All	59.4	76.8	72.9	83.3	-17.4	-10.5
Ethnicity							
	WBRI	98.7	99.6	100.0	100.0	-0.9	0.0
	Black/Black British	1.3	0.4	0.0	0.0	0.9	0.0
	Asian/Asian British	0.0	0.0	0.0	0.0	0.0	0.0
	Mixed	0.0	0.0	0.0	0.0	0.0	0.0
Status							
	Alone	51.1	55.3	57.6	76.4	-4.2	-18.7
	Group	48.9	44.7	42.4	23.6	4.2	18.7
Dog							
	No	79.1	65.9	61.4	56.2	13.2	5.2
	Yes	20.9	34.1	38.6	43.8	-13.2	-5.2
Primary activity							
	Walking through	71.9	56.0	45.5	52.5	16.0	-7.0
	Dog walking	21.0	34.1	38.6	43.8	-13.1	-5.2
	Ball sports	0.0	2.0	5.5	0.0	-2.0	5.5
	Play	0.0	0.0	0.0	0.0	0.0	0.0
	Cycling/running	4.5	3.5	4.2	3.7	1.0	0.5
	Social	1.9	2.5	2.8	0.0	-0.6	2.8
	Sitting	0.5	0.5	0.0	0.0	0.0	0.0
	Negative	0.1	1.3	3.5	0.0	-1.2	3.5
Intensity							
	Sedentary	2.5	4.5	3.4	0.0	-2.0	3.4
	Walking	92.4	88.7	83.4	98.1	3.7	-14.7
	Low	1.5	3.1	8.3	1.9	-1.7	6.4
	Mod-vig	3.6	3.7	4.8	0.0	-0.1	4.8

*Total user numbers for weekday are calculated as a daily mean from data collected over two complete days.

Note: all data except for 'Total user number' represent the *per cent* of total users within each category

3.3 FOCUS GROUPS

Focus groups were used to gather data on experiences and perceptions of local green space, and to inform the location and design of the intervention. Focus groups were first undertaken with local adults and, subsequently, with local adolescents. Recruitment and data collection protocols for each are described.

3.3.1 Recruitment: adults

Aforementioned difficulties engaging with the local community resulted in revisions to the original recruitment strategy and use of mixed groups, rather than age and gender segmented. Initial recruitment efforts involved doorstep and high street recruitment by GW with a small cash incentive for attendance. Poor response prompted an increased incentive (£20) and distribution of invitations to parents via pupils of the local primary school (n=470). This resulted in 35 adult participants attending four focus groups held at the local primary school.

3.3.2 Recruitment: young people

From preliminary analysis of the adult focus group data the need to speak with local young people was evident.[59] Focus groups were conducted at a local secondary school that most adolescents local to the park attended.[††] Following ethical approval and consent from the Deputy Head, the Head of Physical Education arranged the recruitment and logistics for the groups to run. Inclusion criteria were that participants were resident within postcode areas within 300m of the park and/or familiar with/used IntPark. The opinions of 23 adolescents who lived close to, and frequented the park, were obtained through three focus groups, segmented by gender (1 male, 1 female, 1 mixed).

3.3.3 Data collection protocols

Prior to participation all participants were asked to complete consent forms, with parental assent secured prior to the day of data collection with young people. Discussions were semi-structured using guide questions that covered themes related to current perceptions of the park, associated experiences, ideas for improvement and, if applicable, opinions of any recent activities in the park. An experienced qualitative researcher moderated discussions, which were digitally recorded, with contemporaneous notes made by a trained observer. Discussions were transcribed verbatim for

[††] Logistics of amendments to ethical submission, acquiring school permissions and timing of school holidays resulted in youth focus groups were conducted until September 2010, after the summer activity programme

analysis. Key themes were extracted and developed by the group moderator using an inductive approach to ensure that themes were data driven; i.e. that they represent participant views. It was fundamental that the researcher drew upon themes that were representative of individual experiences of the participants, rather than fitting the experiences into *expected* emergent, categories.[60 61]

At baseline, adult participants were asked for consent to be re-contacted regarding follow-up focus groups to discuss the intervention and gauge opinion on the relative success of the project.

3.4 GREEN SPACE AUDIT

As highlighted in 1.1.6, a variety of tools are available for measuring green space quality of varying construction, purpose, and complexity. For the purposes of the present study, an existing tool was adapted for use in local and neighbourhood green space.

The audit tool adapted for the present project was originally developed by Foster et al.[35] for CABE using focus groups and user surveys in five large parks in Norwich.[‡‡] The researchers' initial aim of developing a tool to capture aspects of green space relevant physical activity participation in those spaces met the present project requirements give the focus on engaging with children and young people through active recreation.[62]

Although the domains and organisation of the tool was used as a template, the aim was to create an easy-use tool for scoring of local/neighbourhood or *doorstep* green space areas. The PARA tool[36] helped to inform the scoring approach, further informed by baseline data collection (focus groups and surveys), informal consultation, site visits and recent literature.

The tool, which comprises six domains (Table 3.4), was developed and piloted through visits to nine local and neighbourhood parks in Stoke-on-Trent. Each site was simultaneously and independently audited by two researchers. Scoring involved: (i) calculating mean domain scores from the two observers; (ii) calculating domain scores as a proportion of the theoretical maximum for each domain; (iii) multiplying by weighting factor to give each park a total score (sum of domain scores) out of 100. Provisionally equal domains weights were given (16.7% for each of six domains) and later recalculated to give greater weighting to factors that emerged from the baseline data collection and recent literature as of particular importance in deprived urban green space; specifically, recreational

[‡‡] Permission to use and adapt the tool was sought from the authors in advance.

facilities (25%) and incivilities (25%, as markers of antisocial behaviour). Further detail is given in Section 4.4.

Table 3.4 Audit tool composition

Domain	Description	Items	Scoring	Weight
1. Access	Number of access points	1 items	4 category (0=0-3 to open access)	10%
	Busy roads (reverse scoring), pedestrian crossing, short cuts	3 items	2 category (yes, no)	
	Pathway number and quality	2 items	3 category (0,1,2)	
2. Recreation facilities	Number of equipment for different activities	5 items	Number: 4 category for play facilities (0=0 to 3=≥10); 3 category for all other facility types (0=0 to 2=≥2)	25%
	Quality of equipment for different activities		3 category (0=poor, to 2=good)	
	Quality and provision of open space	1 items	3 category (0=none to 2=a lot)	
3. Amenities	Provision and quality of seating, tables, litter bins, dog bins, signage, lighting	8 items	4 category (0=none to 3=good)	15%
4. Incivilities	Extent of litter, alcohol debris, drug paraphernalia, graffiti, glass, dog mess, noise	7 items	3 category, reverse scoring (2=none to 0=a lot)	25%
5. Usage	Suitability for sport, informal games, walking, other	4 items	3 category (0=Not at all to 2=very)	10%
6. Overall impression	Overall impressions relating to safety, maintenance, vandalism, graffiti, attractive features	7 items	5 category (0=strongly to 4=strongly agree)	15%
Park score			**Sum of weighted domain scores**	**100**
Additional data fields for context and categorising spaces	Predominant land type	1 item	4 category	
	Predominant surface type	1 item	3 category	
	Surrounding area	1 item	3 category	
Total		**41 items**		

4. BASELINE FINDINGS

4.1 POSTAL SURVEY

4.1.1 Sample characteristics

Complete data were available for 89 respondents (34 men, 55 women; mean age 46.2±17.61), representing a response rate of just 8.3% (as a proportion of households). Detailed data for the 51 respondents who answered survey questions in relation to IntPark are presented in Section 6.1.1[§§] (Table 6.1) with 12-month data. The present section presents basic descriptives.

Baseline data indicate an approximately equal gender distribution (47% male vs. 53% female) and mean age of 45.9±17.0 years, with all respondents classified as of White British ethnicity. On average, respondents had lived in the area for a considerable length of time (15.4±12.1 yr). Individual socio-economic data confirmed the relative deprivation in the area (47% with no formal qualifications; 28% in full-time employment), although the high average age was reflected in the 20% retirees.

Self-reported health and physical activity data indicated that two-thirds of respondents considered themselves to be in good or excellent health (66%), but norm-based scores revealed below average physical and mental health overall (6.1.1); indeed, 16% were out of work through long-term health problems. Approximately 40% reported meeting the recommended 30 minutes of moderate intensity activity on five or more days per week (during *recreation*), this could be largely attributed to the high proportion of dog owners in the sample (40%). According to questions about readiness to be physically active, one-quarter of respondents had no intention of increasing activity levels (pre-contemplation).

Considerable responses bias must be acknowledged given the low response and over-representation of older people, retirees, dog owners and the better than expected health and physical activity outcomes. Nevertheless, the data described below did provide some valuable insight into local adults' perceptions and use of the park; not least that 31 out of 89 people chose to answer questions in relation to a different green space despite living within 300m of IntPark.

[§§] At baseline respondents were asked to specify a local green space that was *local* and that they were *familiar with*, and answer questions in relation to that area.

4.1.2 Frequency and nature of use

Frequency of use of IntPark was somewhat dichotomised. Most people either rarely/never visited or visited on most/every day (Table 4.1). The majority of those who reported visiting IntPark did so on foot (95.5%) and travelled from home (88.6%), which was perceived as a short walk (within 5 minutes in 77.3%; within 10 minutes in 97.7%). This suggests a link between accessible local green space (<300m) and active transport through visiting these areas. Indeed, at baseline there was a small, but significant correlation between frequency of visits in winter and physical activity[***] (r=.466, p=.001) and meeting the physical activity recommendations[†††] (r=.349, p=.012); the respective correlations for frequency of visits in the summer were weaker (r=.302, p=.031 and r=.197, p=.166, respectively).

Table 4.1 Frequency and nature of use

		Winter		Summer	
		n	%	n	%
Frequency of visit	Seldom/never	25	48.1	17	32.7
	≤ 1 per wk	8	15.4	9	17.3
	Most/every day	19	36.5	26	50.0
Duration of weekday visit	Do not visit	21	40.4	20	38.5
	≤10 mins	14	26.9	10	19.2
	11-30 mins	13	25.0	14	26.9
	30+ mins	4	7.7	8	15.4
Duration of weekend visit	Do not visit	16	30.8	15	28.8
	≤10 mins	7	13.5	6	11.5
	11-30 mins	13	25.0	13	25.0
	30+ mins	16	30.8	18	34.6

Figure 4.1 illustrates that *walking*, *dog walking* and *getting fresh air* were most commonly reported reasons for visiting the park (37-44%), with *taking a shortcut*, *relaxation*, *taking the children* and *using the play area* reported by approximately one quarter of respondents (25-27%).

[***] Days per week on which respondents accumulated 30 minutes of moderate intensity recreation activity
[†††] Accumulating 30 minutes of moderate intensity recreation activity on 5 or more days per week

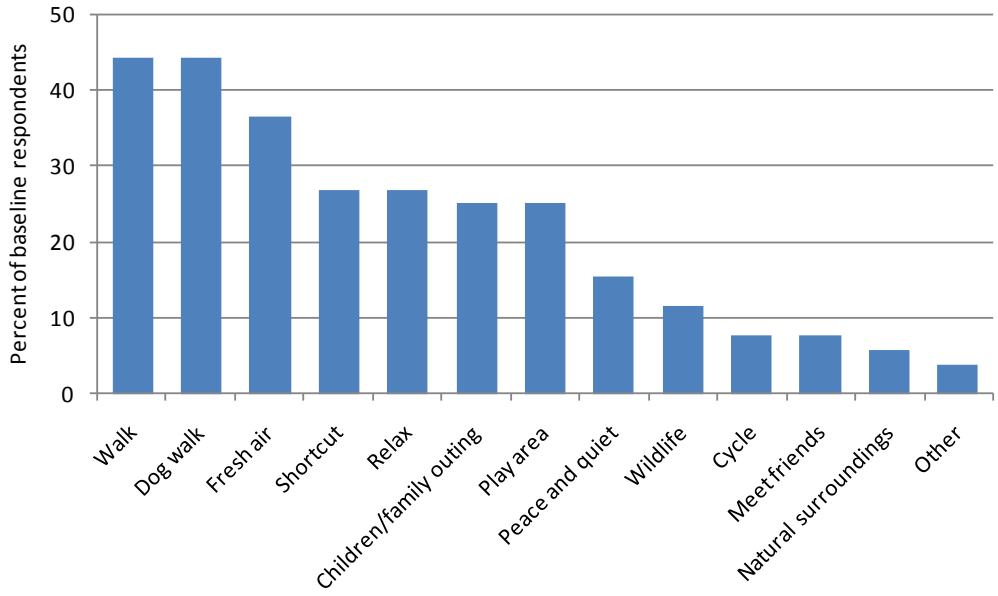


Figure 4.1 Reasons for visiting IntPark

4.1.3 Perceptions of IntPark

Perceptions of IntPark were generally negative (Table 4.2). Most aspects were rated as poor/very poor in approximately half of respondents, with 77% reporting poor/very poor *facilities for families/children*. The exception was *ease of getting around*, perhaps given the many access points and paths running through the site. *Overall satisfaction* illustrated general discontent in over half of the sample (54%).

Table 4.2 Perceptions of IntPark

	Design and appearance		Ease of getting around		Maintenance	
	n	%	n	%	n	%
Do not visit (no opinion)	1	1.9	1	1.9	1	1.9
Good/very good	9	17.3	35	**67.3**	10	19.2
Fair	17	32.7	11	21.2	18	34.6
Poor/very poor	25	**48.1**	5	9.6	23	**44.2**
	Sports facilities		**Facilities for children/parents**		**Overall satisfaction**	
	n	%	n	%	n	%
Do not visit (no opinion)	1	2	1	2	1	2
Satisfied/very satisfied	9	17	2	4	13	25
Neither satisfied/dissatisfied	19	37	8	15	10	19
Dissatisfied/very dissatisfied	23	**44**	40	**77**	28	**54**

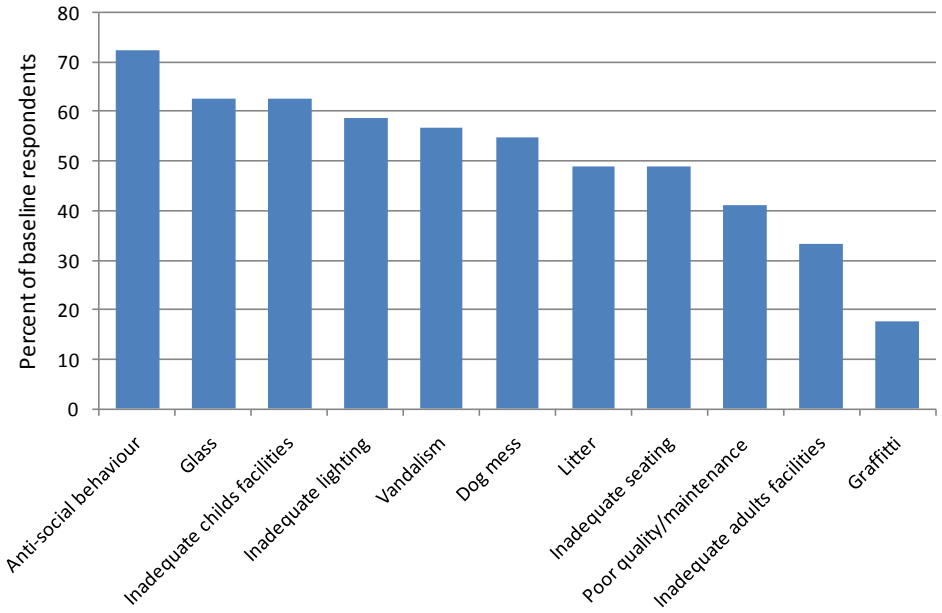


Figure 4.2 Percentage of sample reporting aspects of park that discouraged use

Negative perceptions were similarly reflected in the high proportion of respondents identifying incivilities (from a list); i.e., aspects of the park thought to discourage use or spoil enjoyment of the space. As Figure 4.2 illustrates, anti-social behavior was the most commonly reported, with broken glass, inadequate child facilities and lighting also frequently cited.

4.1.4 Neighbourhood perceptions and social capital

Finally, items on social capital and neighbourhood perceptions indicated discontent with leisure facilities, similar to perceptions of the park, and problems relating to antisocial behaviour (teenagers and vandalism; Table 4.3).

Table 4.3 Distribution of neighbourhood and social capital outcomes

	Disagree		**Agree**	
	n	%	n	**%**
Enjoy living in area	14	27.5	37	**72.5**
Neighbours look after each other	19	37.3	32	**62.7**
Good local transport	5	9.8	46	**90.2**
Good leisure things	36	**70.6**	15	29.4
	Problem		**Not a problem**	
	n	%	n	**%**
Teenagers hanging around on the streets	38	**74.5**	13	25.5
Vandalism	37	**72.5**	14	27.5

4.1.5 Survey summary

Despite the small number of respondents at baseline, some useful insights complemented data from other evaluation components:

- Many local residents were broadly happy with their local area and neighbours, and reported some social activity; yet many were unhappy about anti-social behaviour, which was also the most commonly perceived incivility in the park
- There was a broad perception that the area lacked leisure facilities and the park was similarly deficient in this respect
- Self-reported use of the park was split between those who used it most days/every day and those who rarely/never visit
- The association between physical activity and frequency of park use, even with these small numbers, suggests potential value in promoting park use as a means of increasing community physical activity
- The low response to the survey, although not unexpected, was symptomatic of community low social capital and difficulties of community engagement in these areas (Section 7.1 and 7.3).

4.2 DIRECT OBSERVATION

4.2.1 Patterns of use

Direct observation provided objective data on the level and nature of park use to compliment self-report survey data. For the purposes of intervention targeting and design, key patterns are described. As illustrated in Figure 4.3, the number of *visitors* or *users* was higher on weekdays versus weekend days, with greatest levels of use during the pre-school (8-9am) and after-school (3-4pm) periods.

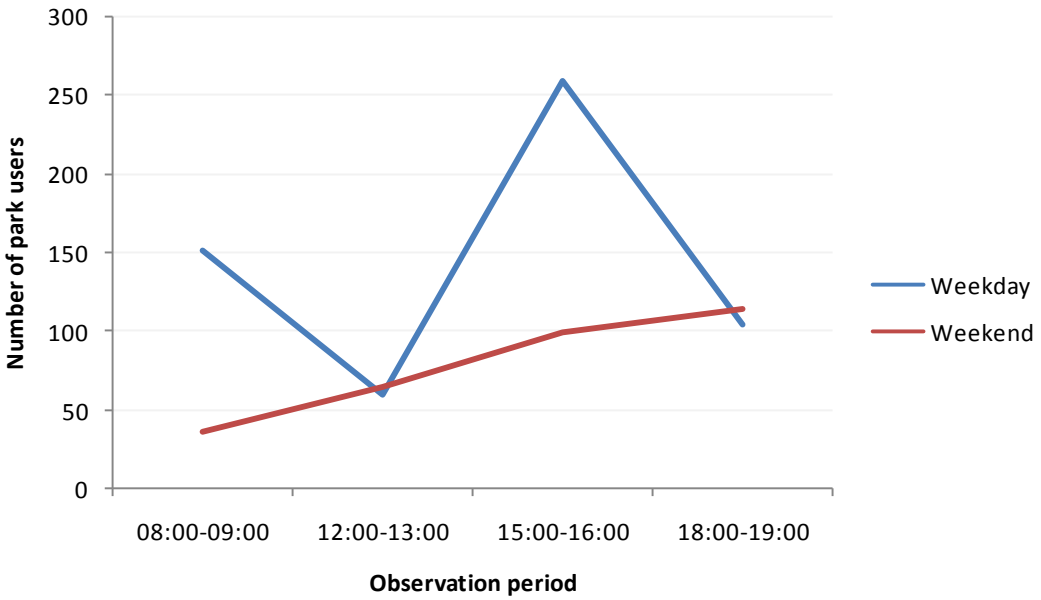
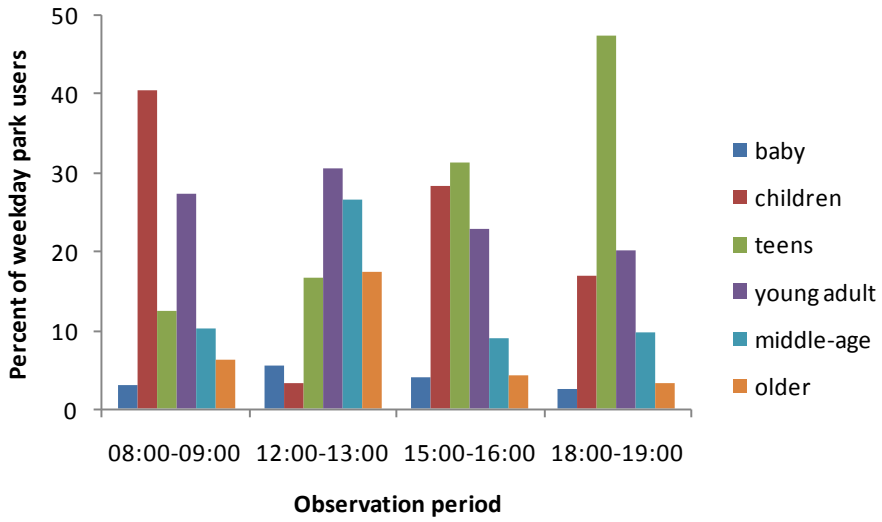


Figure 4.3 Levels of park use at four time points on week and weekend days

These busy periods were largely accounted for by primary school children, their parents (young adults), and teenagers walking to/from the local high school (Figure 4.4a). Consistent with this pattern; on **weekdays**, 89% and 79% of visitors simply walked through the park during the pre and post-school observation periods, respectively. Therefore, observations confirmed that the park was primarily used for access rather than recreation, more so than survey data suggested. During weekday evenings (6-7 pm) this figure was reduced to 55%, and reflected greater use by teenagers (Figure 4.4a) for socialising (Figure 4.5a). Evidently, few of the younger children and parents walking through the park stopped to use it for recreation.

a. Weekday



b. Weekend

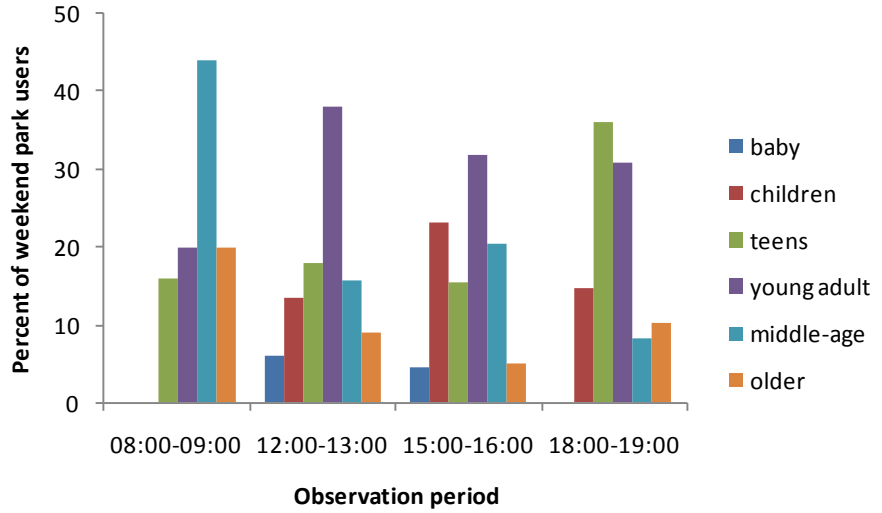


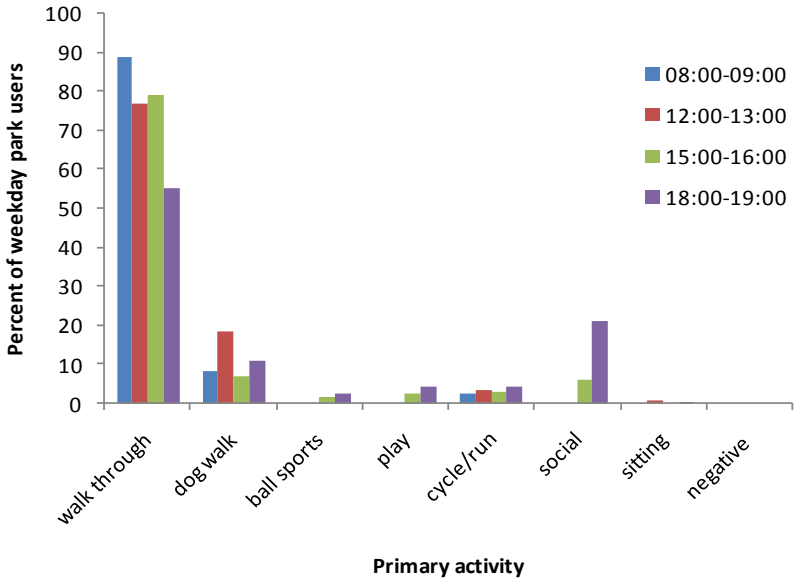
Figure 4.4 Proportion of users in different age groups within each one-hour observation period

Weekend patterns of use were different, increasing throughout the day (Figure 4.3). The higher proportion of middle-aged morning visitors concurred with the larger number of dog walkers (Figure 4.4b and 4.3b).

Aside from adult dog walkers who accounted for 10% of park users on weekdays and 20% at the weekend, the main group visiting the park for recreation, were teenagers, especially during the evening. Teenagers were the most represented age group on week and weekend day evenings (47% and 36% of total users, respectively; Figure 4.4), explaining concurrent higher proportions of those engaging in *social activity* and *ball sports*. Although *ball sport* was used as a general classification, this was almost exclusively football, and usually played in *the cage*, the most popular facility (Section

4). The lack of recreational activity in the park resulted in a low proportion undertaking moderate-vigorous intensity activity (weekday 3%; weekend 9%).

a. Weekday



b. Weekend

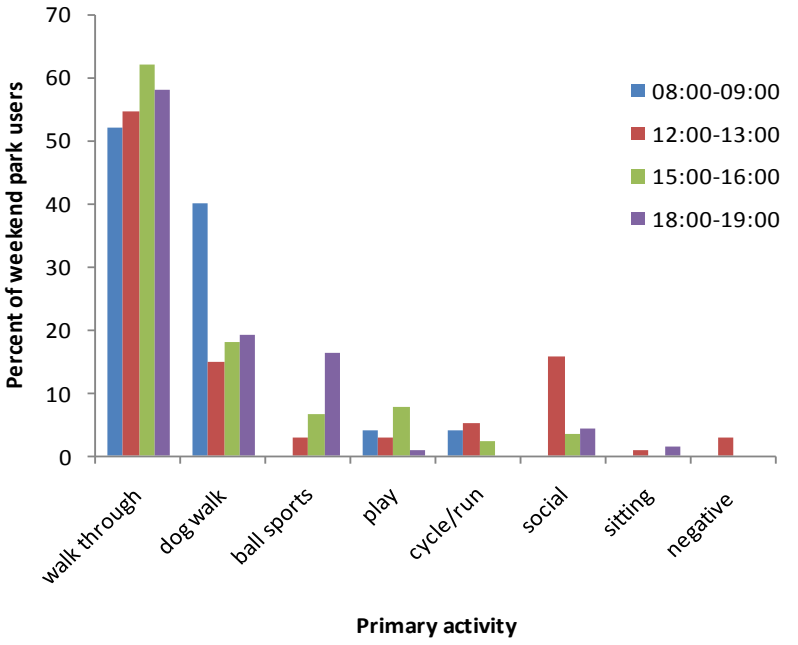


Figure 4.5 Primary activity of park users

4.2.2 Summary

Direct observation protocols appeared fit for purpose, providing useful data on patterns of use by different sections of the community to supplement self-report data:

- The park was predominantly used for access, more so than indicated by survey data. Aside from dog walkers, few visited for recreation, especially during the week.
- In keeping with this pattern, highest levels of *weekday* use were recorded during the two commuting periods, largely accounted for by children, their parents (young adults), and teenagers walking to/from the school.
- That many people used the park for access has positive implications for active transport and health benefits associated with contact with the natural environment, albeit brief.
- However, the lack of recreational use, especially by children/families and the associated lack of active recreation, indicated that IntPark did not serve as an effective community recreation space (supported by focus group data, Section 4.3)
- The high throughput should facilitate community exposure to intervention activities, allowing engagement and promotion to encourage recreational use.

4.3 FOCUS GROUPS

4.3.1 Adult focus groups

The aims of the baseline focus groups were to: establish an appropriate green space for intervention; understand the issues surrounding that green space; identify the local needs with regard to that green space. Four focus groups with 35 local adult residents (Table 4.4) revealed some important and related themes.

Table 4.4 Adult focus group participant characteristics

Group	Men	Women	Age		Ethnicity
			Mean	SD	% WBRI
1	2	2	58.9	3.0	100
2	2	3	62.5	7.4	80
3	3	8	45.0	16.1	100
4	4	11	42.0	15.6	100
Total	11	24	48.0	15.7	97

WBRI, classified as of White British ethnicity

General perceptions of green space

Understanding what green space meant to local residents and its importance to them was a critical part of consultation. Participants associated the term *green space* with "open spaces", and specifically referenced "*parks*" and "*fields*". Participants' first thoughts of green spaces were positive, as places where "*you can breathe*", "*sit and reflect*", "*relax*" or "*enjoy*". In many cases, however, this led to discussion of negative aspects such as "*litter*", "*lack of amenities*". Statements like "*they should be tidy areas, clean parks*" or "*they should be drug free*" implied that this was often not the case.

Green space was considered important by all participants. Most perceived benefits were for psychological wellbeing: "*it changes your perspective... lifts your spirits*"; "*you could be worried to death about something and half an hour at [District Park] and it's all different*". *Getting out of the house* was often referred to. Participants made it clear that it was important to have somewhere that they wanted to visit:

"it's just being able to get into the fresh air... it makes you want to go out if you have somewhere like that to go"

Some went further, indicating that it was important to get out of the area: "*because [town] is such a horrible place... we need to get away to see some greenery*". Physical benefits noted by some participants included fitness, but were secondary to psychological benefits. Finally, knowledge that green space was there (i.e., accessible) was important: "*I'm not going to go every day or week, but if I want it then it's there and that's what I like about it*".

One group focused on the benefits for children, "*you get the kids away from computer games and get them out of the house*", and discussed the role of green spaces for families: "*it's nice when you see the parents going with them actually interacting with them... getting a footy team up or whatever*".

Target green space

Although IntPark has been described in Section 2.1.2, it was chosen as the target for intervention on the basis of preliminary focus group data (in addition to meeting specified criteria). Participants identified a number of local green spaces. Initially, they identified parks that they used most frequently for recreation, which, in most cases tended to be sub-regional or district parks that were further from people's homes, but they were willing to drive to. Participants were very positive about these parks: "*they've got lots of stuff there... it's really interesting*"; "*it's a nice area to walk*" and it has a "*nice play area*".

When discussing local sites, participants were more negative and made unfavourable comparisons with sub-regional and district parks: "*it's just a square bit of [ground]*"; "*there is not... a lot there as a facility... there's nothing that could really attract anybody*"; "*it's just not that pleasant*". Some participants also felt that little was being done to improve green spaces locally and that the area had been overlooked as investment went improving other areas of the city: "*we all pay into the same pot, but we don't get the same facilities*".

When discussing local green space, the most frequently mentioned as IntPark; a small park, centrally located, considered most accessible (within a 2 to 3-minute walk) and with most potential for improvement.

Understanding the issues surrounding IntPark

A number of key themes emerged from discussions surrounding IntPark. Despite some positives, the discussions were dominated by areas for improvement.

a. Positive aspects of IntPark

Participants' difficulties in identifying positive features of IntPark highlighted the extent of perceived problems. That it was *local* was considered a benefit, as most people lived within a few minutes. However, some felt that current issues in the park meant that living close to it also had negative connotations (discussed in more detail below).

One person felt that the park provided social benefits: "*you meet people... when you are out walking the dog... you can stop and talk*", although this was not reflected in all discussions. Participants who owned dogs thought it was convenient for dog walking, but qualified this with the observation that dog bins were too few and often left un-emptied.

A few participants discussed the benefits of the park for children "*it's somewhere for the children to go*" and most felt that *the cage* was popular with many of the local children.

b. *Anti-social behaviour in IntPark*

The most common discussion point in all focus groups was antisocial behaviour: "*we have had no end of problems with youths hanging round*". Participants recounted experiences of antisocial that occurred over many years in the area, but at the time of baseline focus groups, believed the problems had worsened: "*they buy drugs, fighting, drinking, using our wall and backyard as a football pitch*". This caused most participants to avoid the park, particularly after dark and on weekends:

> *"[after dark] when you get the gangs gathering, you wouldn't want to walk through...it's intimidating"*

Participants indicated that the lack of lighting in the park, and the dense area of trees caused poor visibility in the IntParkfter dark. The trees were seen as providing a haven to those taking part in the problem behaviours: "*They used the area round the trees to hide and do drugs and that's why we stopped going there*".

Most participants attributed much of the perceived antisocial behaviour to boredom; that the local area offered little for teenagers, who congregated in the park, and were subsequently thought responsible for vandalism and misuse: "*they smash the place up when they get things now*". In one focus group this provoked a debate as to whether boredom or a "*lack of respect*" was to blame.

> *"All the kids congregate at night down there, so the next day there is broken glass, beer cans everywhere, papers, takeaway rappers and umm it does look a mess most of the time"*

c. Facilities at IntPark

Participants felt that park facilities were very limited. Existing equipment was considered dangerous due to a lack of maintenance or vandalism: "*They have tried things in the past, they have put benches and rubbish bins in the past but they were constructed out of the wrong things, things that could be set on fire*".

> *"There's not really anywhere for the children to play, no swings, no play area"*

The only facility thought to be popular was *the cage*, but even this had its limitations: "*When we go down to the football pitch we have to kick the glass of first which isn't good*". A lack of lighting was again identified as a problem, particularly in winter:

> *"... if it is going to be used for kids…then there should be a facility that when it goes dark that they can use"*

Consistent with survey data, litter, broken glass (i.e., evidence of antisocial behaviour) and dog mess were further deterrents to parents taking their children to the park: "[*son] will say 'can I go to the park?' and I'll say 'no cos there's glass, you're not going up cos you'll get hurt'*"; "*[IntPark] is covered in dog muck*". Poor maintenance was reported in terms of uncut grass, overgrown trees, litter in the play area, and vandalism. All were cited as deterrents to using the IntParknd, as manifestations of antisocial behaviour/misuse, these had connotations for safety concerns.

> *"They just let the trees get overgrown and you don't know who is hiding in there...I won't even use it as a short cut now to get to [town]".*

A new approach

Attitudes regarding the (causes of, and) ways to address antisocial behaviour were contrasting. Many participants seemed dispirited. Having experienced the problem for several years, they were pessimistic about the prospect of change because of the perceived attitudes of those involved:

> *"the respect has gone, and that's what you want, respect for things that you've put there for them and, respect for the people like you that are helping the place to be better, but you're not going to get it, because I think we've gone too far down the road".*

When discussing the type of intervention needed, again many were sceptical that physical changes to the park could make a difference: "*if you put summut in for them I don't think they'd use it I think they'd still just hang about and get drunk*"; "*doesn't matter what you put in for them, they'll still burn it*"; "*I think it would be a waste of time*". This is consistent with earlier work that found one in five people thought investment in the upkeep and maintenance of local parks and public open spaces would be wasted because of vandalism.[28] It also accords with awareness amongst the young people that any new equipment/facilities would likely be vandalised (Section 4.3.2). This is a valuable insight into the low expectations of behaviour in the neighbourhood; an acceptance that any efforts to make positive changes would be wasted.

Others were more positive about change and expressed some personal responsibility to engage with those thought to blame: "*if you approach them in a different way you know, well we know that there is nothing to do, but you can play footy you know instead of saying "clear off" I mean sometimes we do take that attitude... "you're making a mess clear off" but nobody seems to be approaching them in a different way*". Involving the groups that frequent the park in decision making was seen as a way to confer responsibility and ownership, and reduce the likelihood of a positive response: "*I guess we could involve them a little bit more...get some ideas off them as to what they want in the area*".

> *"... if you do something...the things the children want, that they are involved in, they'll look after it and stop the other ones that are wrecking it".*

Rather than blaming young people, these participants attributed antisocial behaviour to (boredom associated with) the lack of facilities for young people, asserting that they are "*not all bad kids*". There was some feeling that as a *community* problem, this should be tackled collectively: "*no they're not [all bad], there are some really nice ones, I mean you get your bad even in your adults... whatever*

age group you are gonna get ones that are gonna cause trouble, I mean it's up to you to do something about it".

Local need

Many suggestions about the type of intervention were for physical improvements, mainly provision of facilities for children and measures to improve safety, particularly after dark. A "*play area*" was frequently requested, but the need to provide for older children was recognised: "*they need to cater for the older ones as well not just the younger ones, that's why the older ones are getting bored*". Participants were less specific about the nature of provision required for the older children:

> *"... something for the bigger children... doing something constructive with their time instead of just wasting it, destroying things, their favourite past time is setting fire to the people's fences"*

Consistent with themes discussed in Section 1.1.3, maintenance of any new equipment was considered essential: "*whatever they do, if you do make a new play area, it needs to be kept tidy maintained cleaned you know and kept up to date*".

The need for better lighting in the park was, again, frequently raised. Perceived benefits included: (i) improved safety - many participants would not use the IntParkfter dark: "*I think if there was more lighting there then I wouldn't mind walking across*"; (ii) enabling use of *the cage* by young people during the evenings (also requested by young people; Section 4.3.2).

Participants suggested a number of other revenue-based organised activities to engage people with the park, again targeting children and young people:

> *"... something for children on for the whole of the six weeks holiday"*

Sustainability of activities was advocated through involvement of parents and older children: "*if you start to organise something like you say if the parents are bringing the children and you can see benefit, you might get the parents to say 'right OK we'll help to organise it, we'll carry it through'... umm then you know you might get more children and the same for the older ones*".

Finally, participants were in favour of a greater police presence to reduce the incidence of anti-social behaviour and help local residents to feel safer in the park: "*I'd also like you say more in terms of the police officers, you know if someone's walking round on a regular basis, you know at different times*".

4.3.2 Youth focus groups

Subsequent focus groups with young people from the local secondary school (Table 4.5) aimed to: establish opinions and use of IntPark; identify local needs relating to IntPark.

Table 4.5 Youth focus group participant characteristics

Group	Male	Female	Age		Ethnicity
			Mean	SD	% WBRI
1	9	0	12.4	0.5	100
2	0	7	12.1	0.4	100
3	5	2	13.6	0.0	100
Total	14	9	12.7	0.8	100

Use of the park

Most participants were regular users of IntPark: "*all the time, every day*". Only one or two of the 23 did not go to the park often as there was "*nothing to do really*". Main activities at the were "*playing football*" or "*watching the lads play football until like it goes dark, and then everyone just sits on the court, finds sumin to do*" and socialising with friends. Several young people made reference to antisocial behaviour indicating that some "*cause trouble mainly*" and "*terrorise people*".

Opinions of the park

(a) Positive

Participants felt that the positive aspects of the park were related to socialising, "*the people that go down there*"; locality, "*it's close as well, to where we live*"; football, "*I like the cage... it's good*"; and the youth workers who visited the park, "*the youth people, we look forward to that*".

(b) Negative

When discussing areas of the park to improve, the majority of concerns related to *the cage*: "*when it rains we are dead cold like, put a roof on the courts then we can play football*". All participants agreed on the need for lighting in the park, especially around *the cage*: "*there are no streetlights... and the few that there are go off really early*".

"we need lights round the court because it gets dark early now and we can't play"

The condition of *the cage* was also discussed: "*there is glass in [the cage]... and when it's wet it's dead slippy*". One participant thought that more bins near the cage might help, but was conscious of vandalism: "*more bins... but it'd just get set on fire*". This awareness was often demonstrated and was similar to the pattern in adult focus groups; suggested improvements were quickly qualified with acknowledgement of subsequent vandalism: "*put goals and nets on the court... but then someone will nick them*".

Participants were generally unhappy with the grass football pitch, rarely using it, but were more concerned with improving *the cage*. Female participants highlighted the need for some shelter and "*somewhere to sit down*". Participants tended to use the trees for shelter, but were again unhappy with their condition:

"... there's glass bottles in there what people chuck... smashed all over the place... and the grass doesn't get cut very often either".

Some suggestions for new play equipment included swings and a climbing frame. It was felt that there was little on the park for their age group: "*there's nothing on it, it's all for babies*". Again, participants recognised that the little existing equipment had been vandalised: "*it's all graffitied and everything and broke*", and that new equipment might be treated similarly: "*a new park thing...but it'd get ruined anyway*" and might be targeted by other groups that use the park: "*the smack heads that come down*".

One participant suggested that some of the walls within the park could be decorated, "*I say we should have... like a big spray painting thing... on the walls*", but displayed consideration for local residents: "*like the ones what the houses wouldn't really care about on the other side*". Here participants began to think about how to reduce the likelihood of vandalism: "*if you got a graffiti artist to do it, it wouldn't get ruined*".

Participants were unsure about organised activities on the park, but enjoyed the youth workers, welcoming more contact with them and the equipment in the mobile youth club (*hopper*):

> *"[the youth workers] should come down everyday", "you can sit in [the mobile youth club] and it's dead warm".*

Tensions

In contrast to local adults who wanted to increase the police presence on the park (Section 4.3.1), young people felt unfairly targeted by the police: "*the police come down and try and blame you for stuff you've not done*". They described a number of incidents where the police had been involved and referred some other groups who they thought were to blame: "*there are teenagers at the bottom of [IntPark] that always cause fights*"; "*the smack heads that come out the pubs*". Again, this is consistent with some themes from the literature (Section 1.1.3).

Perceived ownership

Despite the recognised need for improvements to IntPark and the likelihood of some people vandalising efforts to improve the space, participants expressed a sense of ownership for the park: *"[IntPark] is our park*"; *"[IntPark] isn't a very family park*". One participant described how people do not use IntPark *as a park*, but that it was used by the same groups: "*it's just a certain people's park really, it's not like people come down, it's just like people who are always there*".

4.3.3 Focus group summary

Focus groups provided rich data, the key points from which are summarised.

- Consistent with literature, having local green space was important to residents of this deprived urban community, although they had generally negative perceptions of the park.
- The local neighbourhood park was identified as the most appropriate site given its proximity, perceived barriers to use, and the associated need for improvement.
- The park was important to local teenagers who used the park most days, and felt a degree of ownership; their presence, however, was seen as a deterrent by many local adults.
- Negative perceptions of IntPark among adults related to feelings about the neighbourhood area; that it was neglected, poorly maintained, lacked adequate facilities for the local population, and that the necessary investment tended to go to other areas. This supports the recent evidence that satisfaction with parks is a good marker for satisfaction with the neighbourhood and Council performance.[23]
- The primary concern and deterrent to use was perceived antisocial behaviour by local youth, which was largely attributed to boredom resulting from the dearth of facilities and activities.
- Young people who regularly used the space also perceived a need for better facilities, but felt somewhat victimised regarding perceived antisocial behaviour. They felt unfairly blamed for vandalism and misuse of the park, creating some tension between local adults and young people that apparently contributed to the lack of recreational use of the park by different sections of the community (confirmed by young people and through direct observations; Section 4.2).
- The main target for interventions was identified as children and young people who needed more facilities and organised activities to promote constructive and diverse use of the park.
- Additional changes that could alleviate adults' safety concerns included introduction of more lighting and improving the wooded area to increase visibility and light through the trees. Young people similarly wanted more lights, especially on *the cage*. Unfortunately, some improvements suggested by young people (e.g., improvements to *the cage*, introducing a shelter) were not possible with the available resources/funding criteria.
- Among adults and young people, expectations of the local populations' behaviour towards any new facilities were low. There was a general acceptance that new additions to the park would be vandalised, although some adults suggested ways to reduce the likelihood.

4.4 AUDIT

4.4.1 Domain weights

Table 4.6 shows the domain and overall park scores calculated using differential domain weights:

- Access (10%): by definition *doorstep* green spaces are located within or close to residential estates, often providing access between areas. This was true of all audited sites and did not emerge as a key limitation of deprived urban green space.[21]
- Recreational facilities (25%): identified as key factor in recent literature and ProGreSS focus groups.
- Amenities (15%): lighting and to a lesser extent, seating were identified as important in focus groups (but less so than recreational facilities or antisocial behaviour/incivilities).
- Incivilities (25%): presence of markers of antisocial behaviour/misuse (e.g., litter, broken glass, graffiti); greater weighting reflects findings from focus groups, survey and literature.[21]
- Usage (10%): generic scores of functionality or fitness for purpose, augmenting specific indicators for features and facilities
- Overall impressions (15%): generic measure of park environment.

Table 4.6 Summary scores for nine neighbourhood parks with differential domain weightings

Site	Domain						Total park score	Rank (1=highest quality)
	Access	Recreation facilities	Amenities	Incivilities*	Usage	Overall impressions		
1. ANC	7.0	4.4	0.0	14.5	5.0	10.4	38.2	7
2. DIA	3.0	3.2	0.3	17.7	3.1	11.8	36.5	8
3. IntPark	5.5	8.0	2.8	10.4	4.4	8.3	38.6	6
4. HAN	5.5	13.3	3.4	15.3	6.3	11.0	53.0	3
5. NOB	7.0	4.0	1.3	15.3	3.1	11.5	40.3	5
6. REP	8.0	16.1	8.4	17.7	6.9	12.3	68.7	1
7. RIC	5.0	11.7	7.5	17.7	6.3	15.5	64.9	2
8. SAM	6.0	4.0	5.0	11.3	6.9	12.1	45.8	4
9. WST	5.3	4.6	1.0	12.9	5.0	7.9	33.4	9
Sample mean	5.8	8.5	3.3	16.4	5.2	11.2	49.0	
Sample SD	1.4	5.3	3.1	3.1	1.5	2.3	13.5	
Min	3.0	3.6	0.0	11.6	3.1	7.9	35.1	
Max	8.0	17.9	8.4	19.6	6.9	15.5	72.3	
Weighting	10%	25%	15%	25%	10%	15%	**100**	

*Reverse scoring (high scores reflect *fewer* incivilities)

4.4.2 Comparison with local/neighbourhood green space

According to audit scores, IntPark was ranked 6th (out of 9 sites; 1=highest quality). Approximately average scores for amenities and recreational facilities reflected some comparator sites comprising little more than grass areas with paths and basic provision, such as benches, litter bins, or lighting. This also illustrates the general inadequacy of facility provision in the local and neighbourhood parks audited; i.e., IntPark recreational facilities were approximately average for the sample, despite consistently negative community perceptions. Scores for *incivilities* (proxy for antisocial behaviour or misuse), *usage* (fitness for purpose), *overall impressions* and for *total park score* were below average. This theme of an accessible park with some amenity/facility provision, but which is inadequate and of too poor quality to serve the community, again, confirms themes from survey and focus group data.

4.4.3 Summary of audit findings

- The audit tool gave a reasonable distribution of *quality* scores across the nine sites.
- In relation to characteristics to address through intervention, compared to the average domain scores for the sample of nine parks, IntPark was below average for amenities, incivilities and usage.
- Some very low domain scores for recreational facilities or amenities in several sites reflected a common absence of facilities in local/neighbourhood green space in the city.
- Further use and development of the tool in a larger number of green spaces should help to confirm whether the tool, in its present form, adequately captures the range of local and neighbourhood green space quality. The domain weights assigned on a theoretical basis warrant further testing.
- If combined with direct observation of use in the same areas, it might be possible to link quality characteristics with use more robustly.

4.5 SUMMARY OF BASELINE FINDINGS AND IMPLICATIONS FOR INTERVENTION

The multi-faceted evaluative approach provided valuable insight into issues to address through the intervention promote use of IntPark:

- Children and young people were identified as the primary target for intervention activities. The lack of facilities or activities and low levels of recreational use, especially by children/families, was evident from observation, focus groups and survey data.
- Anti-social behaviour, especially on Friday and Saturday evenings, was the most common concern and deterrent to use for adult residents. The need to engage with and provide activities for local youth was evident.
- Associated safety concerns had implications for site improvements such as introducing more lighting and improving the coppice area to increase sight lines through the trees.
- Focus groups revealed a desire for organised activities and better facilities for children and young people. Organised activities could help to engage with local youth, combined with site changes to effect sustainable changes in site use.

A number of practical considerations also influenced intervention design:

- Initial funding precluded substantial site modifications given the additional resources required to support community engagement (see Section 7.3).
- Difficulties with community engagement prevented community delivery of organised activities by communities within the life of the project.
- Further funding secured could be used for introduction of new equipment, but not improvement existing park equipment (e.g., *the cage*).

The reasons behind anti-social behaviour in parks, the key issues in IntPark, are complex. They demand the root causes, rather than the symptoms, to be addressed. Realistically, this well-established social issue could not be *solved* through a modest 12-month green space intervention. But in recognition that 'solutions must be part of a coordinated, thorough and holistic approach' and '...involve communities and specifically young people in the improvement process,[48](p.24) as far as possible the project team engaged with local partners, community and young people to pursue a coordinated, partnership approach to design and delivery. The intervention activities detailed in Section 5 were, therefore, shaped by baseline data, practical limitations of available resources, and the extent of community involvement.

5. INTERVENTION

The 12-month intervention rand from July 2009 to June 2010, beginning with a programme of organised activities, subsequent physical site modifications and associated consultation.

5.1 ORGANISED ACTIVITIES

To address the need for activities for local children and young people, a programme of activities was implemented throughout the 2009 school holidays. It comprised three weekly activity sessions and was launched with a community event to raise the programme profile and bring local people into the park. This event and summer programme were publicised through local radio, posters in the park, surrounding streets, shops and notice boards, and by distributing flyers (all local households, local shops, local primary school).

5.1.1 Community launch event

The event was primarily funded by the Area Implementation Team (AIT) who helped to organise the majority of activities: Climbing wall; Pot Painting (Groundwork); Football (Stoke City FC Community Team); Street Games (Stoke-on-Trent City Council); Bouncy Castle, balloon modelling, face painting; Fire engine (Staffordshire Fire Brigade)

Community event images:

Climbing wall, pot painting

Bouncy castle, balloon modelling, StreetGames

Football with Stoke City FC mascot and community team coaching (in 'the cage')

Climbing wall, clown, pot painting

An estimated 200 people attended throughout the afternoon; 80 children took part in the Groundwork-run pot painting activity alone.‡‡‡ The event was well received by residents, the AIT and the local police, who welcomed the activity and interest generated in the local area.

5.1.2 Weekly activities

Table 5.1 summarises the weekly programme of activities. Three weekly sessions, two for young children and parents, and one youth football session, ran throughout the holidays. Recorded attendance figures (Table 5.1) show relatively consistent attendance overall, despite poor weather during much of the summer.

‡‡‡ Numerous park entrance and activities delivered by different partners prevented accurate attendance records

Table 5.1 Weekly programme

Dates/times	Activity	Delivered by	Who for	Example activities	Estimated attendance	Comments
14th July – 8th Sept Tuesdays 15:30-17:00	**Child and family play sessions**	Groundwork Community Team	Children (5-11 yr) and parents	Rounders, treasure hunt, bug hunt, bird box making, pot painting, kite making	Weekly average ~ 19 children and parents (approx. 75% children, 25% parents)	Some sessions disrupted by poor weather
24th July – 28th Aug Fridays 15:00-17:00	**Friday play Child play sessions**	Stoke-on-Trent City Council Youth and Play Workers	Children (5-12 yr)	Various games including parachute games, rounders, cricket, balloon modelling	Estimated weekly average 8 children	2 sessions disrupted by poor weather Youth and Play Services relocated sessions to park fit in with the present project
24th July – 4th Sept Fridays 17:00-19:00	**Friday night youth football**	Stoke City Football Club Community Coaches	Youth (11-18 yr)	Football tennis, skills training, five-a-side within "the cage"	Weekly average 12 adolescent males	2 sessions finished early due to rain
Additional concurrent activities						
31st July onwards Thursdays and Fridays 19:00-21:00	**Youth Hopper** (mobile youth club)	Stoke-on-Trent City Council Youth and Play Services	Youth (11-18 yr)	Van visited park for youth engagement through music, gaming, DVD player etc.	Not monitored	Not part of the programme per se, but began running during the summer in response to resident concerns around anti-social behaviour

5.2 SITE MODIFICATIONS

Additional funds secured through the Marks & Spencer Greener Living Spaces award enabled physical improvements to the site. The aim was to promote sustainable changes to use in IntPark, and continue to promote recreational visits to the park following completion of the summer activity. The funds helped to support a programme of ongoing consultation, implementation of site changes and introduction of a new play area.

Two main site changes were appropriate given the themes from baseline data and available resource:[§§§]

i. Thinning of wooded area, raising of tree line and introduction of path and features (e.g., boulders, logs) - to increase visibility in response to safety concerns and improve general aesthetics. This is consistent with recommendations of using physical modifications to improve quality as a means of deterring antisocial behaviour and improving perceived safety. [28]

ii. Introduction of a natural play area – in response to the widely cited lack of children's play facilities, whilst retaining natural qualities of the space. The design was subject to a number of GW planning workshops held at the local primary school for adults and children.

The hot, dry weather in the months following the contractors completing, prevented the grass seed within the mounds taking as hoped. Plans were in place for contractors to re-sow seeds at the end of summer, after which, maintenance of the site will be handed over to the City Council. Despite the area not taking on its final intended appearance, a celebration event the launch event in June 2010 was successful, and attended by approximately 60 parents and children (see images).

[§§§] Funding criteria stipulated that it could be used for introduction of new equipment, not improvement of existing (e.g., *the cage*)

Images of site modifications: *(a) Thinned wooded area with pathway introduced and boulders/logs for climbing/sitting (April 2010, contractors still on site)*

(b) Natural play area (May 2010 shortly after contractors finished; grass seed still to take)

(c) Natural play area, approaching pathway, boulders and newly planted trees

"That day [launch event] with all the kids and parents down there, it were brilliant." (Local resident)

"There was a great turn out for the launch on Saturday and the improvements were very well-received" (M&S rep)

(d)Natural play area at celebration event (June 2010)

5.3 ADDITIONAL FUNDING

Table 5.2 illustrates the fiscal value of contributions from partner agencies to support the project activities. In total this represented a **75% increase of the original project budget**. The neighbourhood AIT funded, and provided officer to time to help organise the launch event, and Youth Services ran play sessions at no cost to the project through relocating existing provision to meet with our common aims. In addition, GW provided match funding and secured further funds to facilitate the physical site improvements and associated consultation with local children and adults.

Table 5.2 Additional funds and in kind support from partnerships working

Additional funding source	Specific use (if applicable)	Amount
Groundwork	Match funding	£10,000
Stoke City Council South Western AIT	Community event activities	£1,316
	AIT Officer time	£500*
Stoke City Council Youth and Play Services	Friday play sessions (2-4 play workers)	£1000*
Marks & Spencer Greener Living Spaces award	Site modifications	£26,000
Total added value		**£38,816**

*Estimated

6. FOLLOW-UP FINDINGS

The intention was for contractors to complete site modifications (April/May 2010), giving time to raise awareness of changes, which might in turn influence use of the areas prior to follow-up data collection. As a result of contractor delays and additional time allowed for the area to settle (e.g., grass seed to take), the *celebration event* did not take place until the end of June. At this point, the site modifications were still relatively new and had not yet taken on the intended final appearance. Follow-up data collection was, therefore, delayed as much possible, but completed by July 2010 to avoid seasonal differences between baseline and follow-up data collection.

6.1 POSTAL SURVEY

6.1.1 Sample characteristics

Follow-up yielded 120 complete surveys. Although higher than baseline, this represented a response rate of 11.2% (as a proportion of household) and included just 16 individuals from baseline. This prevented meaningful within-individual pre-post comparisons. Baseline and follow-up survey respondents were treated as independent samples for analysis and data must be interpreted with caution.

GIS revealed a relatively even distribution of survey respondents within the study area (300m buffer around the park). Table 6.1 summarises survey respondent characteristics at baseline and follow-up, which demonstrated no significant differences between samples: approximately equal gender distribution (slightly more women than men), almost no ethnic diversity; approximately one-quarter in full-time employment and over 40% with no formal educational qualifications. The average age of at follow-up (51 yr) was slightly higher than baseline, with concurrently higher time of residence in the area, and proportion of retirees (non-significant differences in employment status).

Table 6.1 Postal survey sample characteristics

	Baseline (n=50)		**Follow-up** (n=120)		**Total** (n=170)		**Sig.**
	Mean	SD	Mean	SD	Mean	SD	
Age (yr)	45.9	17.0	50.5	15.3	49.1	15.9	NS
Years lived in area (yr)	15.4	12.1	19.7	14.8	18.5	14.2	NS
	n	**%**	**n**	**%**	**n**	**%**	
Total n	51		120		171		
Gender							
Male	24	47.1	53	44.2	77	45.0	NS
Female	27	52.9	67	55.8	94	55.0	
White British ethnicity	51	100.0	117	97.5	168	98.2	NS
Dog							
No	30	58.8	69	57.5	99	57.9	NS
Yes	20	39.2	51	42.5	71	41.5	
Employment status							
Full-time work	14	27.5	31	25.6	45	26.2	NS
Part-time work	8	15.7	18	14.9	26	15.1	
Student	4	7.8	7	5.8	11	6.4	
Unemployed	4	7.8	6	5.0	10	5.8	
Retired	10	19.6	29	24.0	39	22.7	
Look after family/home	3	5.9	10	8.3	13	7.6	
Long-term sick/disability	8	15.7	18	14.9	26	15.1	
Other	0	0.0	2	1.7	2	1.2	
Education qualification (highest)							
Degree (or higher)	5	9.8	7	5.8	12	7.0	NS
A-level (or vocational equiv)	7	13.7	20	16.5	27	15.7	
O-level/GCSE (or equiv)	15	29.4	37	30.6	52	30.2	
no formal qualifications	24	47.1	50	41.3	74	43.0	
other		0.0	7	5.8	7	4.1	
Car							
No	17	33.3	33	27.5	50	29.2	NS
Yes	34	66.7	87	72.5	121	70.8	

NS, non-significant difference between baseline and follow-up

There were no differences in terms of self-reported health or physical activity at baseline (Table 6.2). This is perhaps not surprising given the small numbers and eventual focus of interventions on children and younger people. Timing and resources prevented tailoring and re-targeting the survey to try to capture changes young people. The apparent lack of baseline-follow-up changes in health and physical activity of adult residents should, therefore, not be a cause for concern in this respect. Rather, it provides some confidence that the survey was equally representative of the local adult population at both time points.

Table 6.2 Sample self-reported physical activity and health characteristics

	Baseline (n=50)		**Follow-up** (n=120)		**Total** (n=170)		**Sig.**
	n	%	n	%	n	%	
PHYSICAL ACTIVITY							
Days of moderate PA for 30 min							
0	7	13.7	31	26.1	38	22.4	NS
1	5	9.8	4	3.4	9	5.3	
2	10	19.6	15	12.6	25	14.7	
3	5	9.8	12	10.1	17	10.0	
4	4	7.8	12	10.1	16	9.4	
5	6	11.8	10	8.4	16	9.4	
6	2	3.9	6	5.0	8	4.7	
7	12	23.5	29	24.4	41	24.1	
Meet PA recommendations (5x30)							
No	31	60.8	74	62.2	105	61.8	NS
Yes	20	39.2	45	37.8	65	38.2	
Stage of change for 5 x 30 MVPA							
Pre-contemplation	13	25.5	28	23.7	41	24.3	NS
Contemplation	7	13.7	18	15.3	25	14.8	
Preparation	3	5.9	6	5.1	9	5.3	
Action	9	17.6	21	17.8	30	17.8	
Maintenance	19	37.3	45	38.1	64	37.9	
SF12: HEALTH	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**	
Norm-based scores							
Physical functioning (PF)	47.02	13.13	45.52	12.30	45.96	12.53	NS
Role physical (RP)	45.20	13.26	45.09	12.26	45.12	12.52	NS
Bodily pain (BP)	46.23	13.22	44.11	14.34	44.73	14.01	NS
General health (GH)	42.02	12.63	41.61	12.63	41.74	12.60	NS
Vitality (VT)	46.94	8.34	46.41	10.27	46.57	9.72	NS
Social functioning (SF)	46.67	12.82	45.21	12.86	45.64	12.83	NS
Role emotional (RE)	47.47	13.04	46.29	12.48	46.64	12.62	NS
Mental health (MH)	46.38	11.39	46.30	11.82	46.33	11.66	NS
Summary health scores							
Physical component score (PCS)	45.09	13.53	43.87	13.85	44.23	13.73	NS
Mental component score (MCS)	47.30	12.41	46.81	12.27	46.95	12.28	NS

NS, non-significant difference between baseline and follow-up; for norm-based scores -50 represents average health, <50 represents below average health, >50 represents better than average health

Data in Table 6.2 confirmed that self-reported health of survey respondents was below average for both physical and mental health scores (PCS and MCS), and for all of the norm-based components of the SF12.[****] Although data confirm a lack of differences in the health of respondents at baseline and follow-up, they demonstrate a health need, justifying further intervention to promote health.

[****] Norm-based scores calculated from US population data (UK normative data not available)

6.1.2 Frequency and nature of use

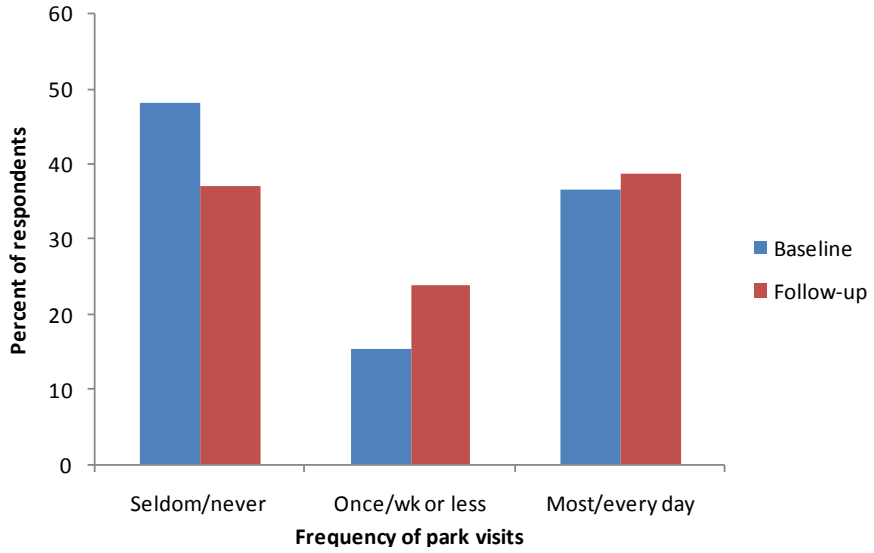
Table 6.3 summarises data on self-reported frequency and duration of visits to IntPark.

Table 6.3 Frequency and duration of use at baseline versus follow-up

		Baseline				Follow-up			
		Winter		Summer		Winter		Summer	
		n	%	n	%	n	%	n	%
Frequency of visit	Seldom/never	25	48.1	17	32.7	45	37.2	25	20.7
	≤ 1 per wk	8	15.4	9	17.3	29	24.0	37	30.6
	Most/every day	19	36.5	26	50	47	38.8	59	48.8
Duration of weekday visit	Do not visit	21	40.4	20	38.5	42	34.7	41	33.9
	≤10 min	14	26.9	10	19.2	39	32.2	31	25.6
	11-30 min	13	25	14	26.9	31	25.6	35	28.9
	>30 min	4	7.7	8	15.4	9	7.4	14	11.6
Duration of weekend visit	Do not visit	16	30.8	15	28.8	24	19.8	26	21.5
	≤10 min	7	13.5	6	11.5	27	22.3	24	19.8
	11-30 min	13	25	13	25	40	33.1	34	28.1
	>30 min	16	30.8	18	34.6	30	24.8	37	30.6

Although not significant, Figure 6.1 illustrates that the proportion of respondents who reported using the park rarely/never was lower at follow-up compared with baseline, during winter (37 vs. 48%) and summer (21 vs. 33%), but the proportion who reported visiting up to once per week was higher (winter 24 vs. 15%; summer 31 vs. 17%).

a. Winter



b. Summer

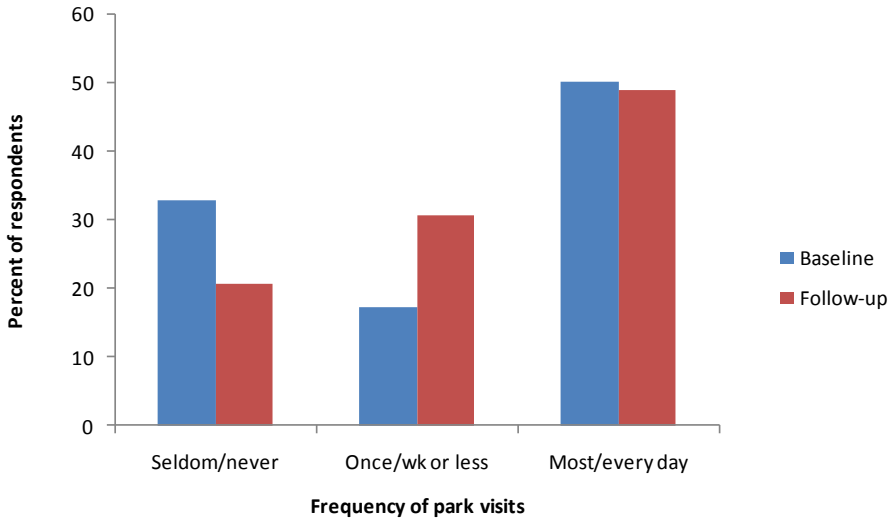


Figure 6.1 Frequency of visits to IntPark

Figure 6.2 shows some differences between baseline and follow-up reasons for visiting IntPark. *Walking* and *shortcut* both remained high, although it is possible that some respondents ticked one or both to mean the same thing. From the observation data (Section 4.2), it was clear that the only people who visited the park specifically for walking purposes were dog walkers. Indeed, a large proportion of survey respondents who reported dog ownership (approx. 40% at baseline and follow-up).

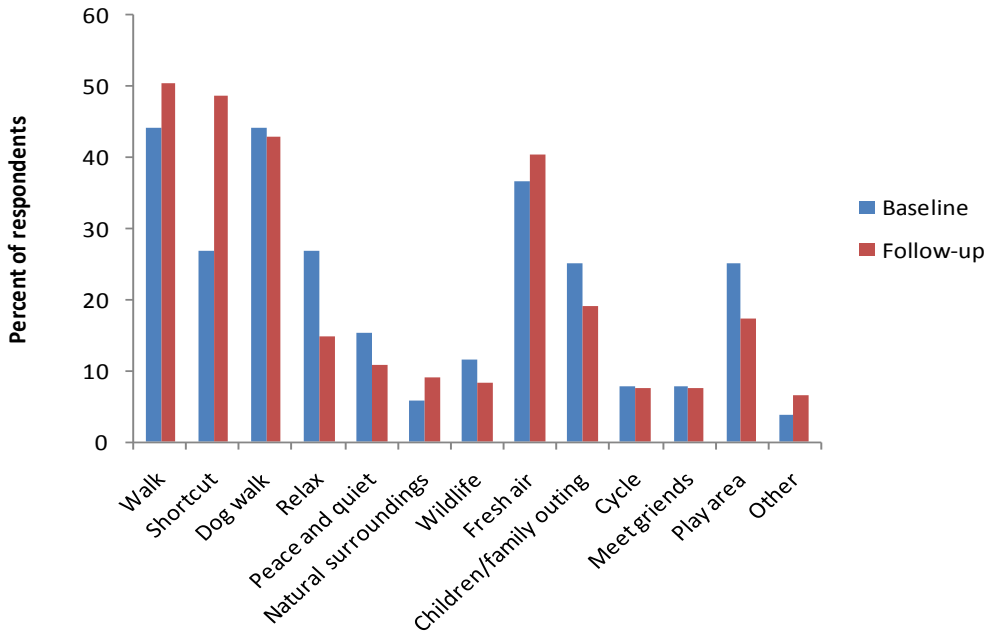


Figure 6.2 Reasons for visiting IntPark

6.1.3 Perceptions of IntPark

Table 6.4 summarises differences between baseline and follow-up perceptions of IntPark. As detailed in 4.1.3, with the exception of *ease of getting around*, baseline perceptions were generally negative with over half of respondents reporting an overall dissatisfaction with the site. At follow-up, perceptions were better in most categories explored.

Table 6.4 Baseline and follow-up perceptions of IntPark

	Design and appearance		**Ease of getting around**		**Maintenance** (trees, flowers, grass)	
	Baseline	Follow-up	Baseline	Follow-up	Baseline	Follow-up
Do not visit (no opinion)	1.9	5.8	1.9	5.8	1.9	5.8
Good/very good	17.3	25.6	67.3	71.9	19.2	33.1
Fair	32.7	30.6	21.2	18.2	34.6	33.1
Poor/very poor	48.1	38.0	9.6	4.1	44.2	28.1
	Sports facilities		**Child/parent facilities**		**Overall satisfaction**	
	Baseline	Follow-up	Baseline	Follow-up	Baseline	Follow-up
Do not visit (no opinion)	1.9	5.8	1.9	5.8	1.9	5.8
satisfied/very satisfied	17.3	13.2	3.8	8.3	25.0	21.5
neither satisfied/dissatisfied	36.5	43.8	15.4	24.8	19.2	31.4
dissatisfied/very dissatisfied	44.2	37.2	76.9	61.2	53.8	41.3

To illustrate this, Figure 6.3 shows the *change* in the proportion of baseline and follow-up samples who rated each aspect as poor or very poor, and good or very good. For all aspects, including *overall impressions*, a lower proportion of respondents at baseline considered the IntParks *poor* or *very poor* (mean change -11.2±4.0%). Perceived improvements were also indicated by the higher proportion of respondents selecting *good* or *very good* categories for four aspects (mean change +3.9±6.3%).

Despite these apparent differences between baseline to follow-up, the greatest of which was for perceived *maintenance* of the site (x^2=5.2, p=.076), they did not reach significance. This is a likely consequence of the relatively small sample and the high proportion of respondents at both time points who selected the intermediate rating (*fair* or *neither satisfied/dissatisfied*).

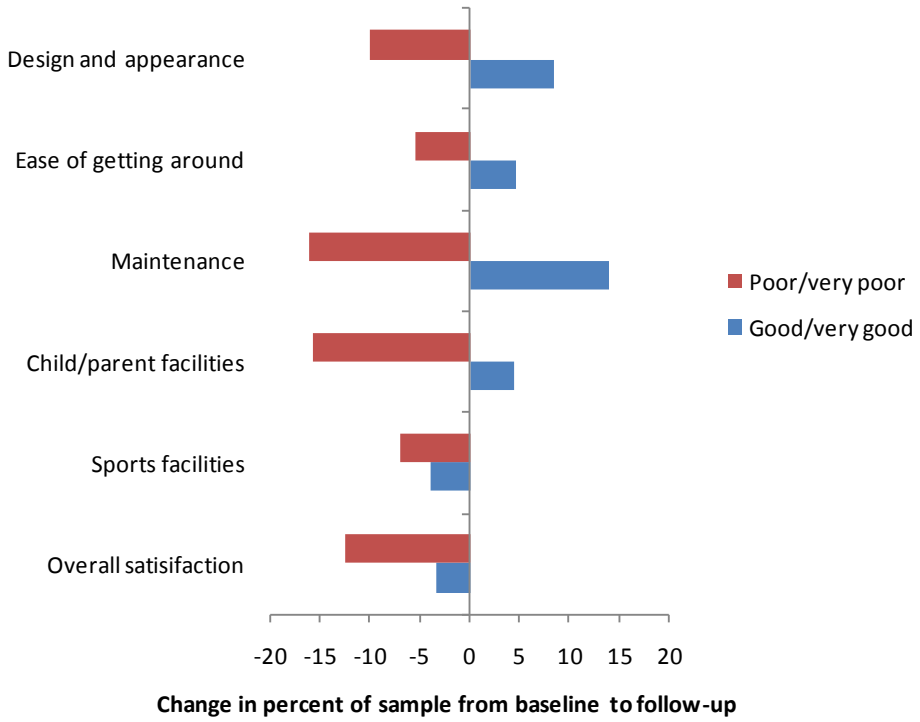


Figure 6.3 Difference between baseline and follow-up in the percentage of sample rating various aspects of IntPark as poor/very poor and good/very good

6.1.4 Response to intervention

Opinions about activities or changes in the park in the previous year were somewhat mixed, but mostly positive. Approximately 60% of respondents thought the site changes represented an improvement (improved a lot 7%; improved 23%; a little better 30%); 24% reported no improvement and 17% did not notice any changes. However, the majority who perceived *no improvement* or had *not noticed changes* were those who rarely or never visited the park (Figure 6.4).

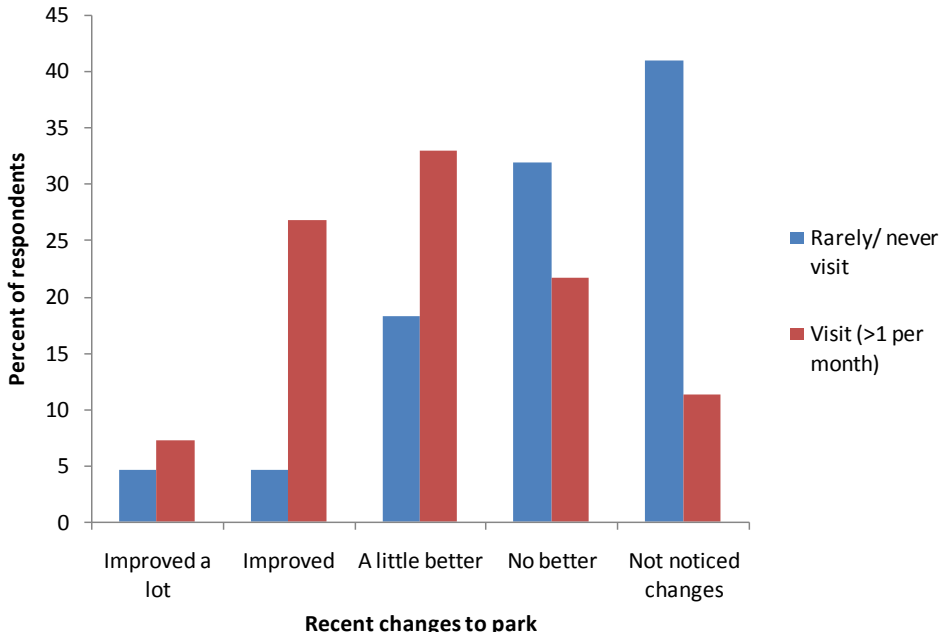


Figure 6.4 Opinions of intervention site changes by frequency of visits

For many who responded to an open-ended question asking them to explain this opinion revealed a consistent theme; local adults wanted more good quality play facilities for young children. Despite the shift towards *natural play* equipment and positive responses to pans during consultation by GW Landscape Architects, some local residents remained keen for more traditional facilities (e.g., swings and slides). Perhaps tellingly, given the apparent reductions (Figure 6.5 and 6.5), antisocial behaviour was less frequently cited as a reason for perceived lack of improvements or discontent with the park.

6.1.5 Neighbourhood perceptions and antisocial behaviour

In addition to some evidence of improved park perceptions at follow-up, concurrent differences in some social capital items were observed. Figure 6.5 shows a lower proportion of respondents reporting negative perceptions of their area at follow-up, significantly in the case of the *teenagers* and *vandalism* as problems in the area.

To confirm this trend, monthly data on reported antisocial behaviour incidents for the IntParknd neighbourhood area were examined (http://maps.police.uk/view/staffordshire).

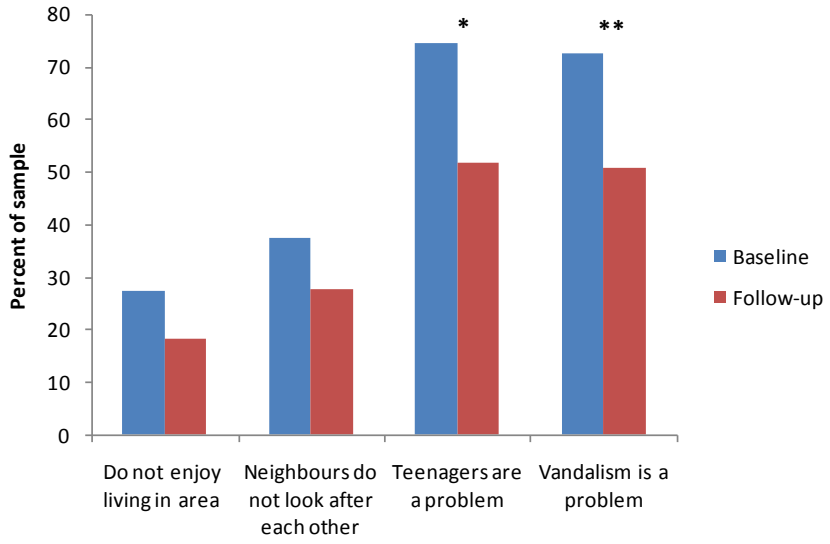


*Figure 6.5 Baseline versus follow-up negative perceptions of the area (*p<0.05; *p<0.01)*

A general trend of lower neighbourhood antisocial behaviour was observed during the intervention period (July 2009-May 2010) compared with pre-intervention (May 2008-May 2009); respective monthly incidences were 23.1±5.6 versus 31.2±6.7. Figure 6.6 shows antisocial behaviour incidents in the park as a proportion of total incidents for the area. This indicates a peak around the time of consultation, which confirms resident reports of a serious problem during baseline data collection (survey and focus groups). The subsequent drop from corresponds with the timing of ProGreSS project activities and concurrent efforts by local partners in response to the seriousness of the issue. Again, this is consistent with apparent improvements in perceptions reported at follow-up.

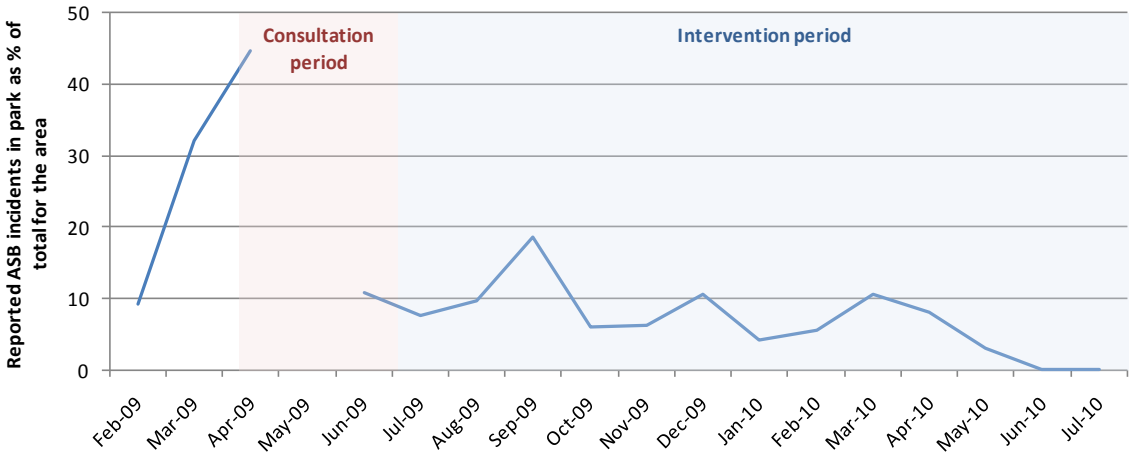


Figure 6.6 Trend in reported antisocial behaviour incidents in IntPark as a proportion of area levels (note: neighbourhood data for April-May2009 were not available)

6.2 DIRECT OBSERVATION

Observation data revealed lower levels of use at follow-up (compared with baseline; Figure 6.7). Total observations over the four one-hour periods at baseline were higher on week days (681 vs. 574) and at the weekend (136 vs. 114). Patterns of use were similar at both time points; i.e., higher during the week, especially during the pre and post-school periods.

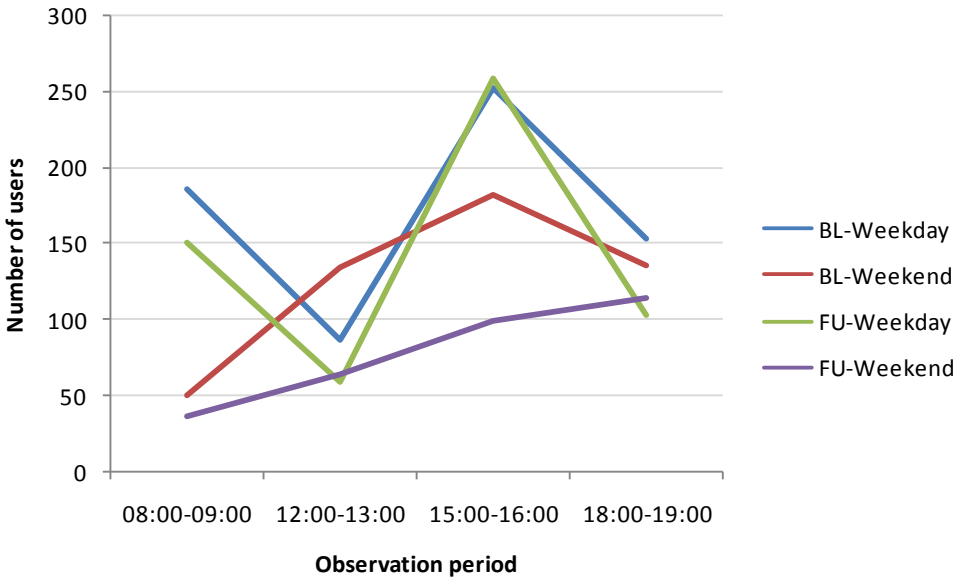
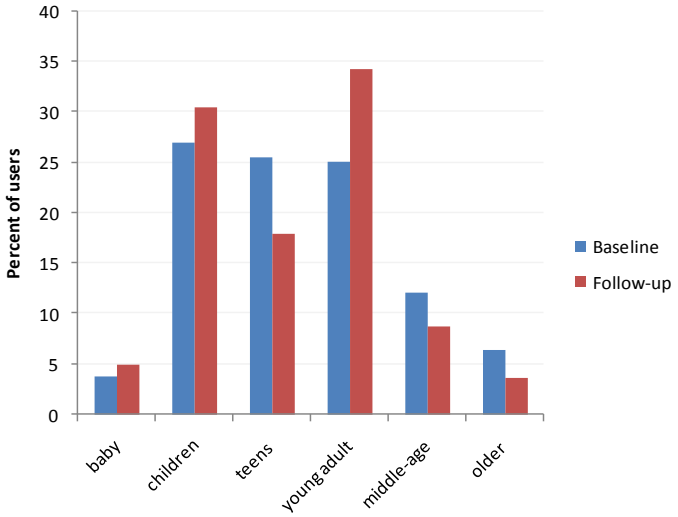


Figure 6.7 Patterns of use at baseline and follow-up

In the absence of control data[††††] it is not possible to determine whether the apparently lower levels of use, especially at the weekend, were park-specific or attributable to external factors (e.g., concurrent large televised sporting events - Football World Cup and Wimbledon).

[††††] Inability to recruit community members to undertake observations and assist with observations precluded use of a control site

a. Weekday



b. Weekend

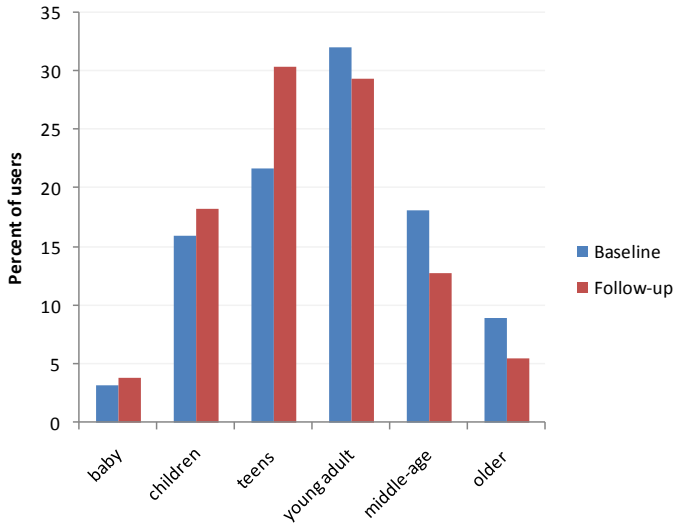
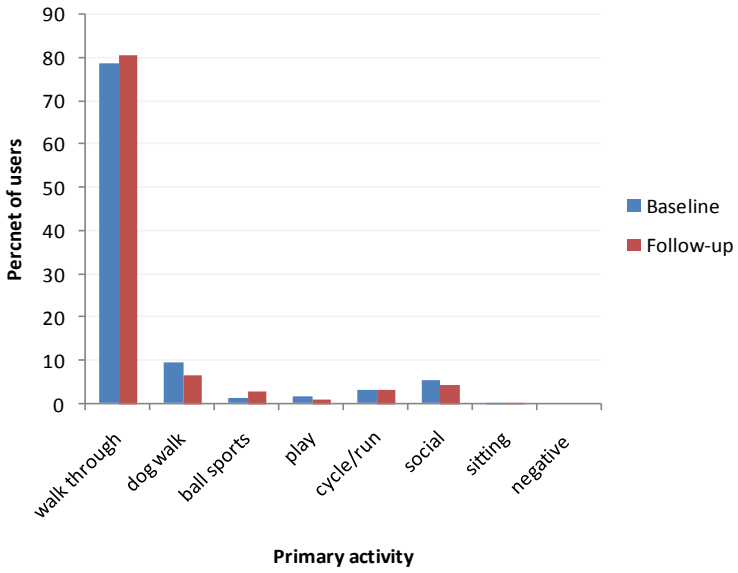


*Figure 6.8 Proportion of total daily users in different **age groups** at baseline and follow-up*

Figures 6.8 and 6.9 highlight few marked changes from baseline to follow-up in terms of estimated age groups of park visitors or the nature of use. There were some discrepancies in terms of the different age groups, with small increases in children and young adult in weekdays, and teenagers at the weekend, but patterns were inconclusive.

The vast majority of visitors still used the park for access. The largest differences were the reduction in the proportion of dog walkers and increase in the percentage playing ball sports at the weekend.

a. Weekday



b. Weekend

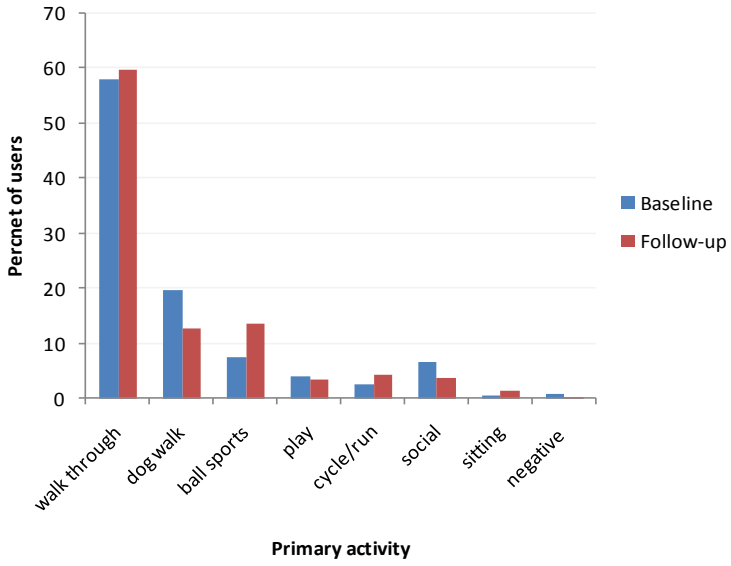


*Figure 6.9 Proportion of total daily in different **primary activities** at baseline and follow-up*

Overall, few differences in use from baseline were evident. The overall reduction in users was not attributable to weather, which was fair to very warm/sunny at both time points. Given the better perceptions of the park among local adults and reduced antisocial behaviour (real and perceived) at follow-up, control data would be necessary to determine whether such an effect was park specific.

6.3 FOCUS GROUPS AND INTERVIEWS

The aims of follow-up focus groups and interviews were to: understand peoples current feelings towards the park (one year on); Gain feedback regarding to the intervention; identify further improvements.

Only four baseline participants attended the follow-up focus group sessions, which were not incentivised. This was again symptomatic of low motivation to get involved reported in case studies (Section 7.1 and 7.3). Those unwilling to attend were asked to take part in a telephone interview, enabling data collection from a further seven local residents (Table 6.5)

Table 6.5 Focus group and interview sample characteristics

	Men	Women	Age		Ethnicity
			Mean	SD	% WBRI
INT	2	5	54.0	7.7	100
FG	1	2	67.6	7.0	100
Total	3	8	59.0	9.9	100

Although the survey and police data suggested an overall improvement in antisocial behaviour in the area, this remained an issue at follow-up; "*we have found that there are a lot of gangs that hang about and they are off putting for the younger ones that go over there*". An improvement was recognised, "*There was a lot of antisocial behaviour there... but I don't think it's quite as bad as it was; they have clamped down on it a bit*", but participants were still concerned about using the IntParkfter dark: "*I don't go when it's dark, I'm not stupid*". Issues related to antisocial behaviour, such as littering, were also highlighted: "*There is still a problem with young people at night leaving beer cans and broken glass around*".

Encouragingly, as a result of the park improvements and activities, some participants had been expressed a wish to become involved and proactive in addressing the issues:

> "... *what they ought to do is get these kids together, and I don't mind a bit of input, I'm telling you, I'd enjoy it. Get em together and let them see that we're not ogres. We'll help them like*".

These participants were optimistic about the progress that youth workers had made with local young people in the park: "*[youth workers] I think it's a good idea because they did engage with those kids*". Although participants were keen to improve the relationship between local residents and the youths that use the park, they were conscious of how they might appear:

"*They like look at us and think old fogeys don't care, but we do care. We care what they do don't we*".

Again, consistent with baseline opinions, it was felt that the antisocial behaviour stemmed from a lack of facilities for young people: "*I think its boredom. I think its boredom with them, I really do*"; "*There is nothing for the...adolescents, there's very little, what clubs they have got they keep shutting down because the funding has gone*."

"*We've got thirty thousand people in [area name], which has got nothing and those kids have got nothing.*"

With this recognition, some participants expressed a greater sense of responsibility and desire to get involved than was evident at baseline:

"We want to help, at least we'll help and be positive that we will help you, whatever you want, we'll try and do. It's the only answer I think".

When discussing the intervention within the park, the majority of participants recognised that there had been some physical changes: "*We have seen that there's been a bit of development with the trees because they have been thinned out*"; "*They have just put some new things in*". Most of the participants saw the changes as positive: "*It's looking really smart at the moment*".

"I cross it daily and I take the kids at the weekend...it's looking really nice now, they've done a lot of work there...they've cut back all the horrible trees and sort of thinned everything out... and put new pathways in and a climbing frame for the children".

A number of follow-up participants, however, were either unaware of the changes, or did not feel that they enhanced the area: "*I can't comment on whether it is nice or not round there because I haven't been round*"; "*All [grandson] wants to do is climb on those trees, but he can't because they are too dangerous*". Although this participant was concerned about the safety of the natural play equipment, she confirmed that it was attractive to children, perhaps suggesting a lack of familiarity with natural play (compared with more conventional park equipment).

General appreciation of ProGreSS efforts to improve the site and introduce some play facilities was qualified by a feeling that more could still be done: "*I think they'll enjoy it more would enjoy it more, if there was more large equipment*"; "*I think they could still do with a few swings of something for the children... it could be a lot more interesting... but it is a lot better than it was*". Consistent with relatively pessimistic sentiment of some adults and young people at baseline, low expectations

regarding the treatment of new equipment were evident: "*It's a bit basic... if there could be a bit more... I think a couple of swings would be nice... but whether the vandals would attack them I don't know*".

A need for seating was mentioned, more so than at baseline: "*A few more seats...it would encourage people to sit down and use the space*". Unsuccessful previous attempts were also recounted: "*there used to be tables and chairs in the park, but they didn't last long... we could do with a couple of seats*". Within the focus group there was a discussion about putting in seats that could not be destroyed by vandals, and locating them so that any groups that congregated would not disturb local residents. Again, this demonstrated constructive thinking in the context of behavioural issues in the park.

The organised activities that occurred within the intervention period were positively received by all those that noticed them: "*I thought it was a good thing that they did things for the younger people*"; "*I thought it was very good, because quite a lot of people came*". The community launch event in July 2009 was specifically highlighted as being good for the local area. Participants regularly highlighted that the local area was in need of intervention, and were happy to receive external support: "*Everyone really appreciates it*"; "*any little improvement is an improvement.*"

6.4 AUDIT

The audit was repeated at IntPark to compare with the baseline scores for it and the eight comparator sites (Table 6.6). An increase in quality was detected with IntPark ranked 4th compared with 6th at baseline. Therefore, relatively small changes in site appearance and facilities, based on community consultation and other baseline data, were reflected in the *quality score*. The lack of changes from direct observation indicated that changes in the quality had not produced marked changes in use, despite some apparent improvements in community perceptions of the park from survey and focus group/interview data that corresponded with the better audit score.

Table 6.6 Baseline and follow-up audit scores for IntPark compared with baseline data from comparison sites

Site	Domain						Total park score	Rank (1=highest quality)
	Access	Recreation facilities	Amenities	Incivilities*	Use	Overall impressions		
1. ANC	7.0	4.9	0.0	16.1	5.0	10.4	40.2	
2. DIA	3.0	3.6	0.3	19.6	3.1	11.8	38.4	
3. IntPark-BL	*5.5*	*8.9*	*2.8*	*11.6*	*4.4*	*8.3*	*40.6*	*6*
3. IntPark-FUP	6.5	10.7	6.0	7.5	5.0	17.5	53.2	4
4. HAN	5.5	14.7	3.4	17.0	6.3	11.0	55.8	
5. NOB	7.0	4.5	1.3	17.0	3.1	11.5	42.4	
6. REP	8.0	17.9	8.4	19.6	6.9	12.3	72.3	1
7. RIC	5.0	12.9	7.5	19.6	6.3	15.5	68.3	
8. SAM	6.0	4.5	5.0	12.5	6.9	12.1	48.2	
9. WST	5.3	5.1	1.0	14.3	5.0	7.9	35.1	9
Sample mean (BL)	5.9	8.8	3.6	15.5	5.2	11.8	49.5	
Sample SD (BL)	1.4	5.1	3.0	4.0	1.4	2.9	12.8	
Min (BL)	3.0	3.6	0.0	7.5	3.1	7.9	35.1	
Max (BL)	8.0	17.9	8.4	19.6	6.9	17.5	72.3	
Weighting (%)	10	25	15	25	10	15	**100**	

BL, baseline; FU, follow-up

7. CASE STUDIES

A number of follow-up interviews were conducted with key stakeholders to gain further insight into the project; its impact, its operation and how it was perceived by stakeholders.

7.1 CASE STUDY 1 – LOCAL RESIDENT

Ann (*pseudonym*) is included as a case study to demonstrate the difference that the project and associated activities made to a local resident who engaged with the project and consequently changed their outlook and behaviour towards local youth. Ann over 70 years old, and has lived with her husband, approximately 150 yards from IntPark for over 30 years. Ann was involved with the project from the outset and, as a result, became proactive in trying to improve the situation with local youth. The park was initially seen as the source of distress for some local residents (through perceived antisocial behaviour), but Ann now recognises it as part of the solution.

> *'**Those fields need to be for everybody**, good, bad or indifferent. Let's get em on that field. If they're on that field, they're not up and down the street are they?'*

Through her involvement, Ann was aware of the coordinated effort to tackle antisocial behaviour in the IntParknd the role of the project in highlighting the problems during consultation.

> *'You've had the base and you've opened all avenues for other things to go on, which was needed... without you I don't think any of this would have gone off.'*

Discussions during project consultation and intervention planning produced a change in Ann's attitude and behaviour towards local youth. Originally described as *'**it was a case of them and us**, but then I thought no you've got to start talking to them.'*

> *'About 3 months after you started talking to us... I went out to these teenagers, talking to them. And from then on it sort of broke all barriers. **It really did bring the barriers down** and I was ever so pleased.'*

Ann has since taken further action, visiting the mobile youth club that now visits the park to engage with the local youth each week and has since made plans to visit and volunteer at the local youth group. Ann has continued to be an advocate of the project and concurrent activities by Youth Services because she has noticed a reduction in the antisocial behaviour:

'I'm not sitting here, watching my window in case they come throw eggs at me. I haven't done that for a good 12 months now since you started all this kicking it all off. I think it's marvellous and ***its made our life a lot better****.'*

This is likely to be a combination of *real* changes through the efforts of the Youth Services, the Police and ProGreSS/Groundwork, but also the change in Ann's perceptions from breaking down the barriers and fear of young people through engaging with them. Consequently, and following the physical site improvements as part of the project, Ann and her husband began to visit the park for the first time in years.

'*Me and [husband], I said shall we go and walk across the park... it was lovely, grass had been mowed and he says "this is how it used to be". It used to be a lovely park... now he hadn't been across there for 12 years, neither of us* had*.'*

Ann is not representative. She is an example of the difference that can be made to people in areas with antisocial behaviour issues (perceived and real) by engaging and being proactive. Ann sees negative attitudes and low community motivation to get involved barriers to further improving the situation.

"There's quite a few of them, who are critical of everything's that's done."

"It's no good us sitting down that school moaning, "this is not happening, this isn't", if we don't do something about it".

Ann was going ask others to join her in going to the Youth club, but has experience of people's reticence to involvement in community efforts:

"I've sort of given up on em. Cos it's like wasting your breath... It's like the neighbourhood meetings; they were coming, moaning and not prepared to do anything about it...."

Ann was one of many at baseline who expressed fear of antisocial behaviour by local youth that prevented her from leaving the house at certain times or using the park at all. The project activities and discussions prompted Ann to engage and she has subsequently discovered greater freedom and now enjoys the park with her husband for the first time in over a decade. Ann's experience of low motivation for community action in many residents reiterates the challenges to community work in deprived urban areas (Section 7.3).

7.2 CASE STUDY 2 - POLICE PERSPECTIVE

The Police supported the project from throughout and allowed the project team to attend the local Partners and Communities Together (PACT) meetings to speak with residents and have since used baseline data to make the case for more lighting in the park (Section 9).

Box 2. Extract from local PACT newsletter (July 2010)

YOU SAID: The condition of the IntParknd the antisocial behaviour is causing concerns for local residents.

WE DID: We are continuing to pursue various projects in and around the park. We have been working with numerous partner agencies to help improve the area, particularly Groundwork, who designed and constructed the natural children's play area in the park. Reports of antisocial behaviour increased while the park was under construction, but this seems to have stabilised now the site has been completed. Initial signs for the play area are positive and it appears to be very popular with 8-12 year olds. Groundwork has also cut back the trees in the area and created a pathway running though the middle, which will help improve visibility at the park.

Box 2, an extract from the July 2010 edition of the PACT newsletter, gives an overview of the antisocial behaviour situation in IntPark, which was augmented with data from an interview a local Police Community Support Officer.

Antisocial behaviour in IntPark had been an increasingly serious issue in the park in the period before the project intervention activities (and concurrent activities by other partner organisations) began:

> *"it was really 2009 that we had a major issue... you start to get a bit of a reputation, it attracts a few more people ... a few of the older ones."*

In this respect the project was well-timed and as a resulted of coordinated efforts, the situation improved: '*We're getting so few calls here [park] at the moment... I would say we've had none in the last couple of months, literally none... then it does show the difference."*

A number of factors were thought to have contributed to the reduction in antisocial behaviour in the park, including "*getting the right group of people in here, the people who live in this area and probably that way they feel more of a duty of care towards it.*" So in addition to Police efforts to keep the area free from "*more serious individuals*", an improved rapport with local teenagers, combined with provision of activities and facilities were important from the Police perspective.

"A lot of youth games and activities has undoubtedly helped... it kind of occupies their mind."

"And on the positive as well, the natural play area here... its attracted, definitely in my eyes a good group of children here, probably 6 to 9 years old."

Again, the importance of various local partners working together was highlighted, in this project and in general, as a successful way of working to tackling neighbourhood issues, such as antisocial behaviour:

"You just have to deal with the problem from lots of different directions... but partner agencies, local council, youth workers, people like yourselves [SU and GW] who can devise facilities and work with the young people."

"Certainly yourselves and Groundwork particularly, and the council youth workers and probably the police from all those agencies, I think they've all definitely played a role."

The need for input from local residents was also noted: "w*hen working with other major problems... you need local residents talking to you".* As the success of projects to improve the local area and IntParkre contingent on community involvement, identifying key community members, such as Ann (Section 7.1) appeared important for community policing:

"Part of my job, was really looking around and trying to find people,... people like [name], who was very passionate about certain things and knew how things worked and knew what she needed to do".

In turn, the challenge of securing community involvement was recognised, with examples of local neighbourhood watch groups and community groups that "*folded after a couple"* or tend to be *"very sparsely attended"*.

Regarding the role of the park and the way forward, there was not an impression that parks/green space *per se* attract antisocial behaviour commonly associated with them. Rather this was seen as a consequence of the "*group and the environment around you... If that's the nearest congregating point then they'll go there. If it isn't then the same issues will probably occur in a terraced estate*." The project activities were viewed positively, as an example of changes that should now be taken further:

"... now we've seen what could happen, what the natural play facility has shown me... I would love to have more facilities for young children on this park... it's the ideal location. You've got [place name], that side, [place name] that side, I think something here would be really lovely and it would be really popular."

These final sentiments confirm the need and opportunity for further work in this park to continue the upward trend of perceptions and behaviour that emerged from study data.

7.3 CASE STUDY 3 - COMMUNITY WORKER

Groundwork specialise in community projects. Yet, as evidenced below in an interview with Sarah (*pseudonym*), a member of GW staff who, the area proved particularly challenging. The initial difficulties in engaging with two communities meant focusing on one community, but even then, the issues faced shaped the project and findings.

For GW, the challenges of this project were encountered early on when trying to recruit residents (from two areas) for consultation focus groups using a range of approaches. In addition to posting invitations to over 1000 households, GW were "*knocking on doors, we were even stopping people on the streets, because we weren't getting many people to reply to us, to even answer the door... most people weren't interested."* Even when contact was made: *"Some were not interested, "it's not for me duck," "I don't live here"... you know you could tell they were making a few excuses.* ***The ones that said they would become involved, but we know later on that they didn't****."*

A link was made between the reluctance of the residents to get involved and the environment. People were seen to have *"very very low motivation"* to get involved, content to *"just get through life you know"*. A lack of community was noted in relation to the area's geography; the absence of a centre or hub for community activity made it feel "*a bit like a desert*":

> *"There isn't a village, that you can even say these are the houses around the shops... there was no kind of central area that you could go and find people."*

> *"There is no community anymore in that area... It's just a large area of properties with people living in it who don't have a way of communicating with each other."*

The lack of facilities for youth was also quickly apparent through project consultation. Sarah saw that there was "*nothing for young people"*, resulting in "*a lot of young people hanging around, kicking their heels then committing what is termed as antisocial behaviour. Whether it's perceived or genuine*."

Another important consequence of the lack of community, physically or socially, was that people keen to get involved and make a difference lacked the critical mass to do so.

> "*... they were really people who wanted to change things, but they were the lone voices and they'd struggled all their life trying to do this and somehow they hadn't managed to do it. They were too alone..."*

A key perceived role of the project team was to enable those proactive community members to express their concerns about the IntParknd do something about it. The change in Ann (Case study 1) through her involvement was cited as an example of success: *"She has gone from a woman with a voice, but no one was listening to her. We allowed her to be listened to. And now she can do something about it... doing something that she wouldn't have been able to do without us intervening."*

> *"We gave people a voice... and to be heard... and we've taken it seriously."*

Consistent with the project aims and feedback from the Police and some residents, the involvement of multiple partners was a necessary and beneficial way of working:

> "*The PACT people being involved has been great, the Police, and Staffs Uni have been great... the AIT have been really useful... some of the community members, the school... The councillors were great as well*."

This partnership approach was also seen as the way to move forward. Having worked hard to establish and develop links in the area, if funding permitted, the team were now well placed to move forward and make a greater difference:

> *"If we started something new now or a continuation, we'd quickly get the partners on board because they've seen our success.*"

The modest, but tangible project successes in a challenging area were recognised, and the need to let the community celebrate positive changes was identified: *"You've got to tell people when they've done something positive that they have achieved that, not us. You know you've got to get the community to believe that then they might be willing to do another thing."*

> "*... It's sort of positive reinforcement... That's how you build up continuation of involvement."*

8. SUMMARY

On the basis of the evaluation data, experiences and events throughout the ProGreSS project, a number of conclusions and outcomes are summarised.

- This 18-month project focused on a small neighbourhood park in a deprived urban neighbourhood in Stoke-on-Trent. Effective partnership working was used to lever in further funds to maximise project impact in a challenging environment.
- A four-part evaluation provided a holistic impression of the park; its use, local perceptions, areas for improvement, and the relative success of intervention activities.
- Consistent with the literature, residents of the study area valued, but were largely dissatisfied with, their local green space, often opting to drive to larger sites for recreation. Antisocial behaviour and inadequate facilities/activities for children and young people were identified as key barriers to use. Consequently, the majority of visitors, many of whom were children and young people walking to/from school, used the park for access not recreation.
- The programme of consultation, organised activities and physical site improvements to address these concerns formed part of a larger effort to tackle antisocial behaviour in the area that involved the Police, the City Council AIT and Youth Services, and schools. A combination of site improvements, introduction of a natural play space and some organised youth and children/parent activities were implemented.
- Follow-up data suggested improvements in perceptions of the park, although apparently not manifesting in changes in use at the time of data collection. There is some evidence supporting the logical assumptions that perceptions are a prerequisite for conferring the physical activity and health benefits from green space. This could, therefore, represent the beginnings of the park becoming more of a health promoting asset in the community.[13]
- A concurrent reduction in reported antisocial behaviour in the area was more pronounced in the park during the period of the project. Although this cannot be attributed directly to project activities, as part of a larger coordinated effort by a number of partners. ProGreSS was recognised as a contributing factor by stakeholders.
- Community engagement was challenging in the neighbourhood area. This was not only experienced directly by the project team, but confirmed through interviews and focus groups with local residents and stakeholders (Police and GW). However, follow-up focus group did indicate a positive change in the attitude of some residents who expressed a greater willingness to get involved in such community efforts.

- ProGreSS identified a considerable community need and opportunity: relatively small investment in this neighbourhood park could mean that it serves a large number of residents much more effectively. Through its location as a central congregating point for children and youth from a number of areas, the park represents a good opportunity and location to engage positively with a large number of young people, increase ongoing youth work, and implement further site improvements (e.g., more equipment for younger and older children).
- Low levels of social capital remain a key barrier, although important links have been established (e.g., with Youth Forum) to facilitate this. The 2004 report, *Decent parks? Decent behaviour?*[28] found that three-quarters of people surveyed would like to be involved in improving their local area in some way. Our experience is that *saying* did not translate in to *doing* with a few exceptions.
- Notable individual successes (e.g., Case Study 1) should be used to advocate the difference that can be made if residents work closely and engage with efforts to improve their local area and green space.

9. SUSTAINABILITY

From the outset, sustainability was a key consideration. To this end a number of activities were initiated outside of the key project activities.

- In response to discussions about using inter-generational activity to break down existing barriers, one participant now visits and takes soft drinks and snacks down to the Youth Services 'hopper' or 'rocker' (mobile youth club), and spends time with local young people.

- A meeting was organised between the newly established Youth Forum leader and some proactive older residents. They have since planned to attend one of the weekly local Youth groups, hopefully marking the start of a process. Discussions around the Youth Forum and local adults bidding for funds as a recognised community group, for example, to improve *the cage*, have been facilitated.

- Groundwork continue to pursue and offer support to community groups in this regard as a means of providing the further facilities for local youth and children, and play sessions in the park.

- Using evidence collated through the project, local Police and residents have made progress towards getting additional lighting for the park, particularly for *the cage*.

- The collection of extensive data in the area leave the potential for further follow-up as work continues. In future, the *lasting value* of ProGreSS in starting the process and raising the profile of need for investment in the area should become more apparent.

- The ProGreSS project has demonstrated the added value that partnership working and of using multifaceted evaluation to monitor impact.

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