DISABILITY INCLUSIVENESS IN EDUCATIONAL INSTITUTIONS
(Qatar University, Qatar)

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ABSTRACT

Study Focus:
Physical Disability

KPI:
- Internal spaces
- External spaces
- Connecting features

Aim?
Develop a simplified assessment framework

WHERE?
Qatar University Female Campus

Non-Disabled QU students

Methodology - SURVEY
Checklist developed by Lau et al. (2015)

Disabled QU students
Buildings were selected based on proximity; all buildings were located in QU female section due to cultural challenges.
**Survey Analogy**

Students were asked to rank each item in the survey within the range of 1-5.

Where 1 is the lowest, and 5 is the highest degree of satisfaction.

- Non-disabled students
- Contacted through online links & physical contact
- Students/Faculty members/staff
- 20mins duration
- Qualitative & subjective

- Disabled students
- Contacted through physical contact
- Students only
- 20mins duration
- Qualitative & subjective

### Research method & output

<table>
<thead>
<tr>
<th>RESEARCH METHOD</th>
<th>RESEARCH OUTPUT DESCRIPTION</th>
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<tr>
<td>Selection of assessment criteria- Literature review</td>
<td>Selection of checklist criteria for building assessment</td>
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<td>Building selection for assessment - Proximity</td>
<td>Five buildings were selected for assessment</td>
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<td>Survey 1 (221 responses)-Data from non-disabled respondents</td>
<td>Building assessment based on non-disabled participants</td>
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<td>Survey 2 (24 responses)- Data from disabled respondents</td>
<td>Building assessment based on disabled participants</td>
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<td>Comparative analysis- Descriptive statistical analogy</td>
<td>Identify gap in building assessment</td>
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<td>Workshop (eight participants)- deductions and validation criteria through review</td>
<td>Develop revised checklist</td>
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<td>Assessment (non-disabled participant)-Field work</td>
<td>Assess buildings based on revised checklist</td>
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<td>Comparative analysis- Descriptive statistical analogy</td>
<td>Disparity between results of the two assessment checklist tools</td>
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### Non-disabled students - No. of responses:

- **59** College of Engineering C07
- **59** College of Arts & Science C01
- **26** Women’s main building C04
- **43** Girls Classroom building GCR
- **44** College of Business H08

### Disabled students - No. of responses:

- **6** College of Engineering C07
- **2** College of Arts & Science C01
- **2** Women’s main building C04
- **5** Girls Classroom building GCR
- **9** College of Business H08
## Workshop Output:

### External Spaces
- Disabled Parking
- Entrance door width
- Designated access route to disabled parking
- Vehicular route separated from pedestrian route
- Non-revolving doors at entrances

### Internal Spaces
- Desk spaces for wheelchair users
- Entry ease to disabled toilets
- Disabled resting spaces in all areas
- Toilet centrally located
- Height of reception desks
- Natural Daylight no glare
- Drinking water fountain for disabled
- Visual contrast between walls and floors
- One unisex disabled toilet
- Evacuation plan and procedures

### Connected Features
- Travel distance less than 45m to the toilet
- Ramp entrance immediately adjacent to stairs
- Door opening pressure
- Ramp slope
- Ramp surface to not be slippery
- Ramp landing length
- Corridors clear of obstructions
- Visual contrast between the ramp & floor

## Results:
- A simplified version of the checklist
- Existing criteria leads to subjective responses
- Reduce the categories from six to three
- 29 Criteria were spread across the 3 categories
## Data Analysis

<table>
<thead>
<tr>
<th>COLLEGE OF ENGINEERING</th>
<th>COLLEGE OF ARTS AND SCIENCE</th>
<th>COLLEGE OF BUSINESS</th>
<th>WOMEN’S MAIN BUILDING</th>
<th>GIRLS CLASSROOM BUILDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>C07</td>
<td>C01</td>
<td>H08</td>
<td>C04</td>
<td>GCR</td>
</tr>
</tbody>
</table>

### Non-Disabled Facility User Responses - checklist adapted from Lau et al., (2015)

- **Mean Value**
  - C07: 0.03
  - C01: 2.0
  - H08: 3.6
  - C04: 4.8
  - GCR: 6.4

- **Building Ranking**
  - C07: 5
  - C01: 4
  - H08: 3
  - C04: 2
  - GCR: 1

### Disabled Facility User Responses - checklist adapted from Lau et al., (2015)

- **Mean Value**
  - C07: 26.0
  - C01: 42.0
  - H08: 12.1
  - C04: 23.5
  - GCR: 3.2

- **Building Ranking**
  - C07: 2
  - C01: 1
  - H08: 4
  - C04: 3
  - GCR: 5

### Authors review - Developed assessment checklist

- **Mean Value**
  - C07: 3 (0.1)
  - C01: 15 (0.5)
  - H08: 12 (0.4)
  - C04: 0 (0)
  - GCR: 2 (0.07)

- **Building Ranking**
  - C07: 3
  - C01: 1
  - H08: 2
  - C04: 5
  - GCR: 4

### Conclusion:

We conclude that the last assessment above is more comprehensive for the study.