

Lifestyle & Obesity in Asian Adolescents in New Zealand

'The OPIC Project' A four country study of Obesity Prevention In Communities

Shirin Foroughian [s.foroughian@auckland.ac.nz]

Robert Scragg

David Thomas

John Raeburn

Samson Tse

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Background

- Very little evidence on Asians
- Main causes of obesity:
(results from 2002 national children's nutrition survey)
 - Missing breakfast
 - Purchasing school food from dairy
 - Soft drinks (e.g. coke, sprite)
 - Physical inactivity
 - Watching TV

Main Study

- High schools
 - Intervention in Mangere area
 - Control from other parts of South Auckland
- Baseline measurements in 2005
 - Eg. weight, height, food and activity questions
- Interventions implemented during 2005-07
- Follow-up measurements
 - until 2008

Objectives

- To identify young New Zealand Asian's nutritional and exercise behaviours
- To understand the factors influencing these behaviours
- To investigate young New Zealand Asian's understanding and knowledge of heart health
- To suggest a health promotion/community development model to empower and improve the health of young New Zealand Asians

Methodology

- Both quantitative and qualitative:
 - Quantitative data was collected during the baseline measurements of the New Zealand arm of the OPIC study in 2005
 - Qualitative data was collected involving 12 focus groups (4-6 people each) in 2006

Questionnaires

Students answered questions about:



- Food Patterns
 - breakfast & school meals
 - Fruit, vegetables
 - sugary drinks & takeaways
 - After school foods
- Family & Food Patterns
- Activity Patterns
- TV Patterns
- Games Patterns
- Opinions of Body Weight
- School Environment
- Knowledge

- Students enter responses directly into personal digital assistants (PDAs)
- First major study to use software developed by WHO (called eSTEPS)
- Whole class completes questionnaire and weight & height measurements within a 50 minutes period

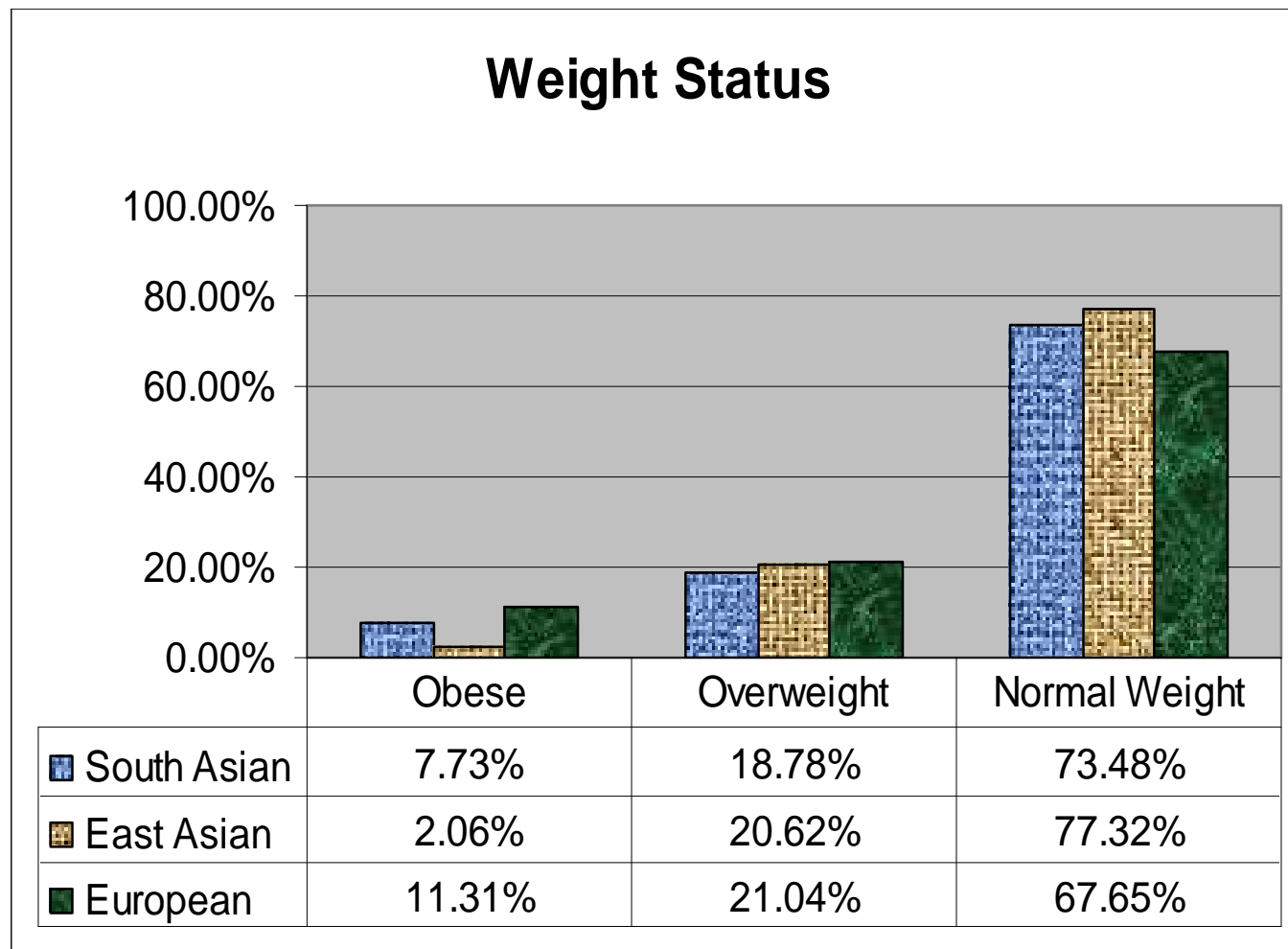
Measurements

- Height
- Weight
- Waist circumference
- Impedance (BIA)

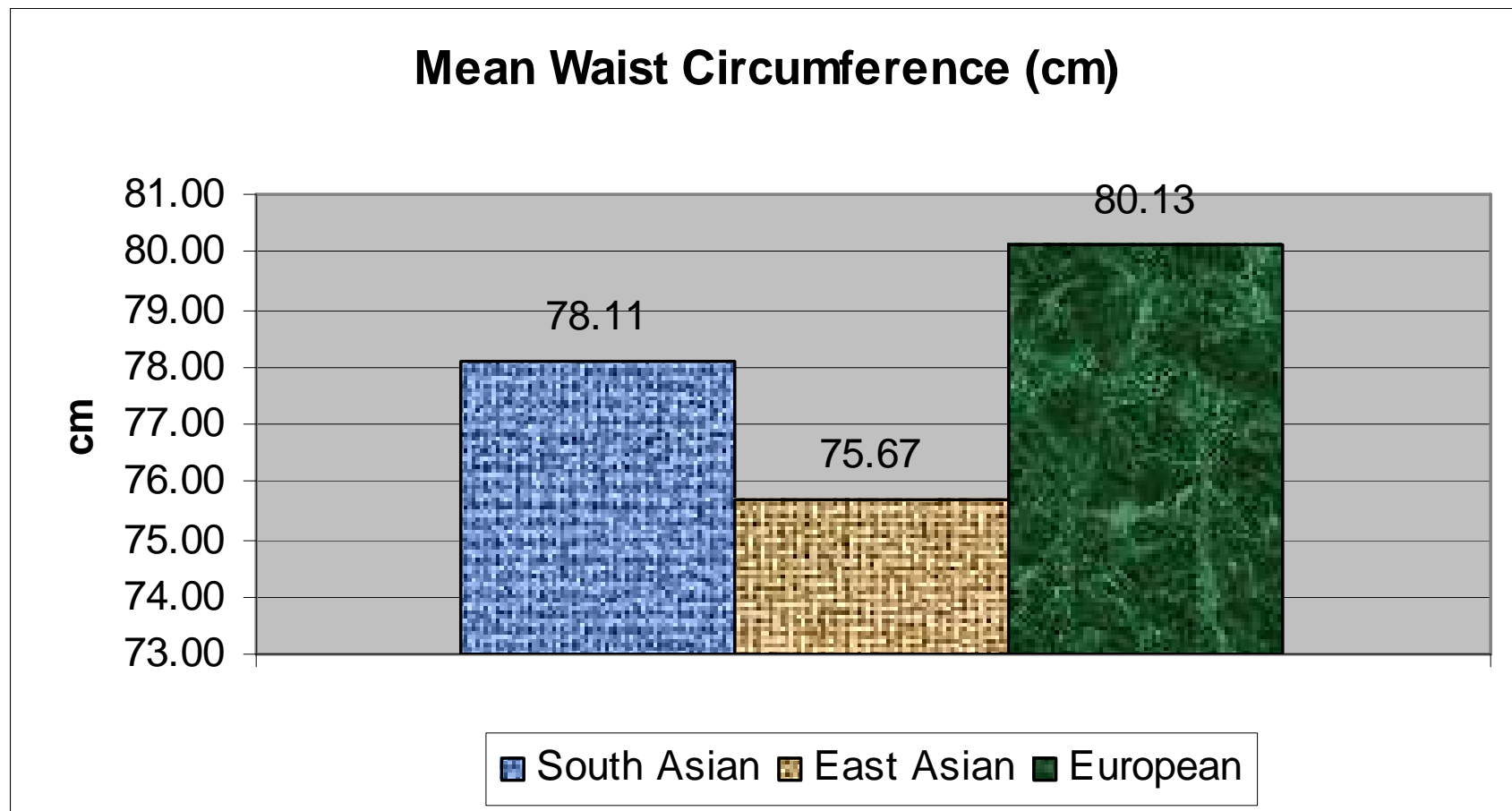
Analysis: Demographics

- 52%  48% 
- Age range: 12 – 18 year olds
- South Asians: 222
(Indian, Pakistani, Afghani)
- East Asians: 115
(Chinese, Cambodian, Thai, Vietnamese, Philippine, Taiwanese)
- Europeans: 485

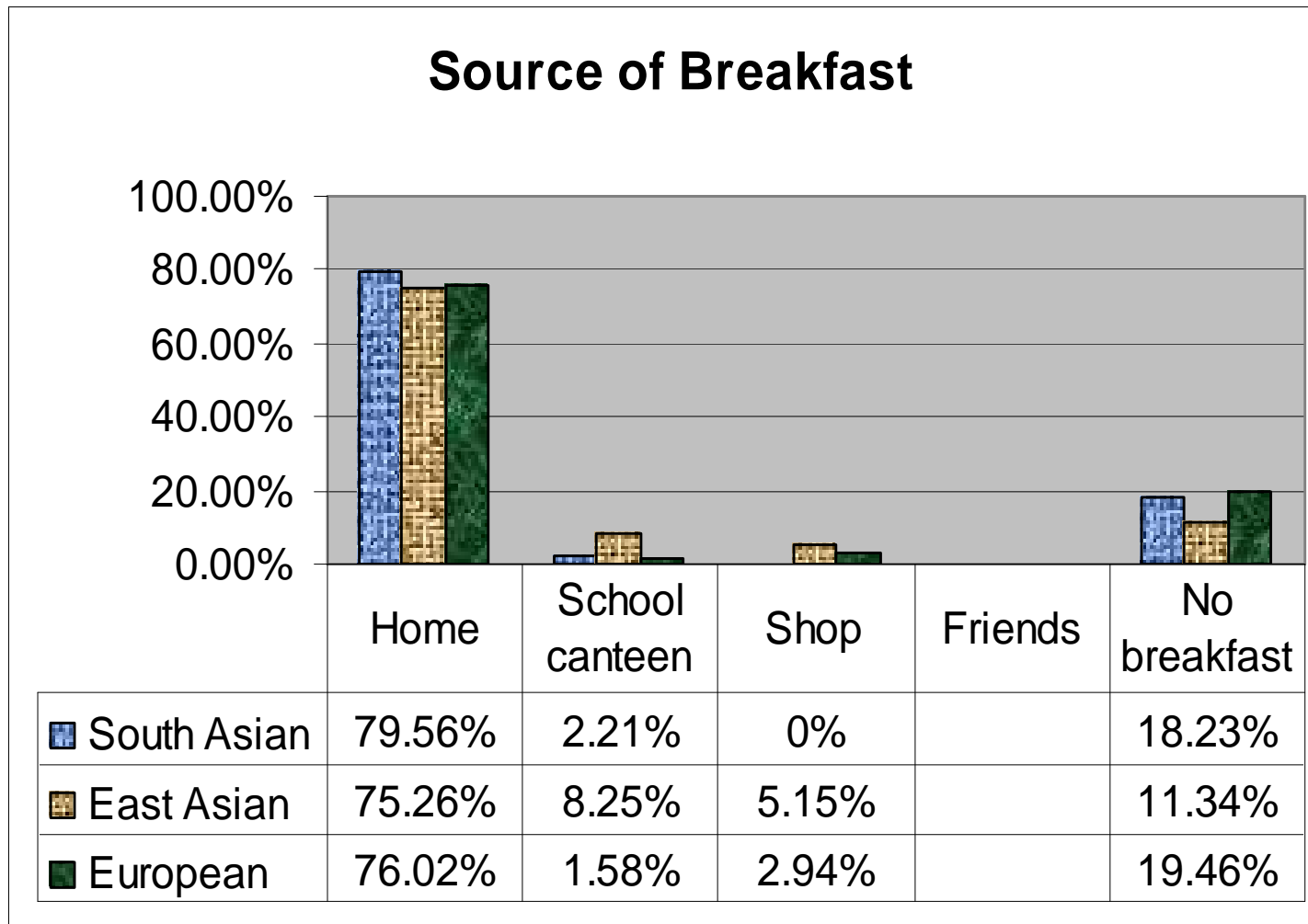
Analysis: Anthropometric Measures



Analysis: Anthropometric Measures



Analysis: Food Patterns



After School Foods (Most Days):

1: biscuits, potato chips, instant noodles

2: pies, takeaways, fried foods

3: chocolate, lollies, sweets, ice cream

Snacks	1	2	3
South Asian	29%	9%	19%
East Asian	29%	12%	16%
European	21%	9%	15%

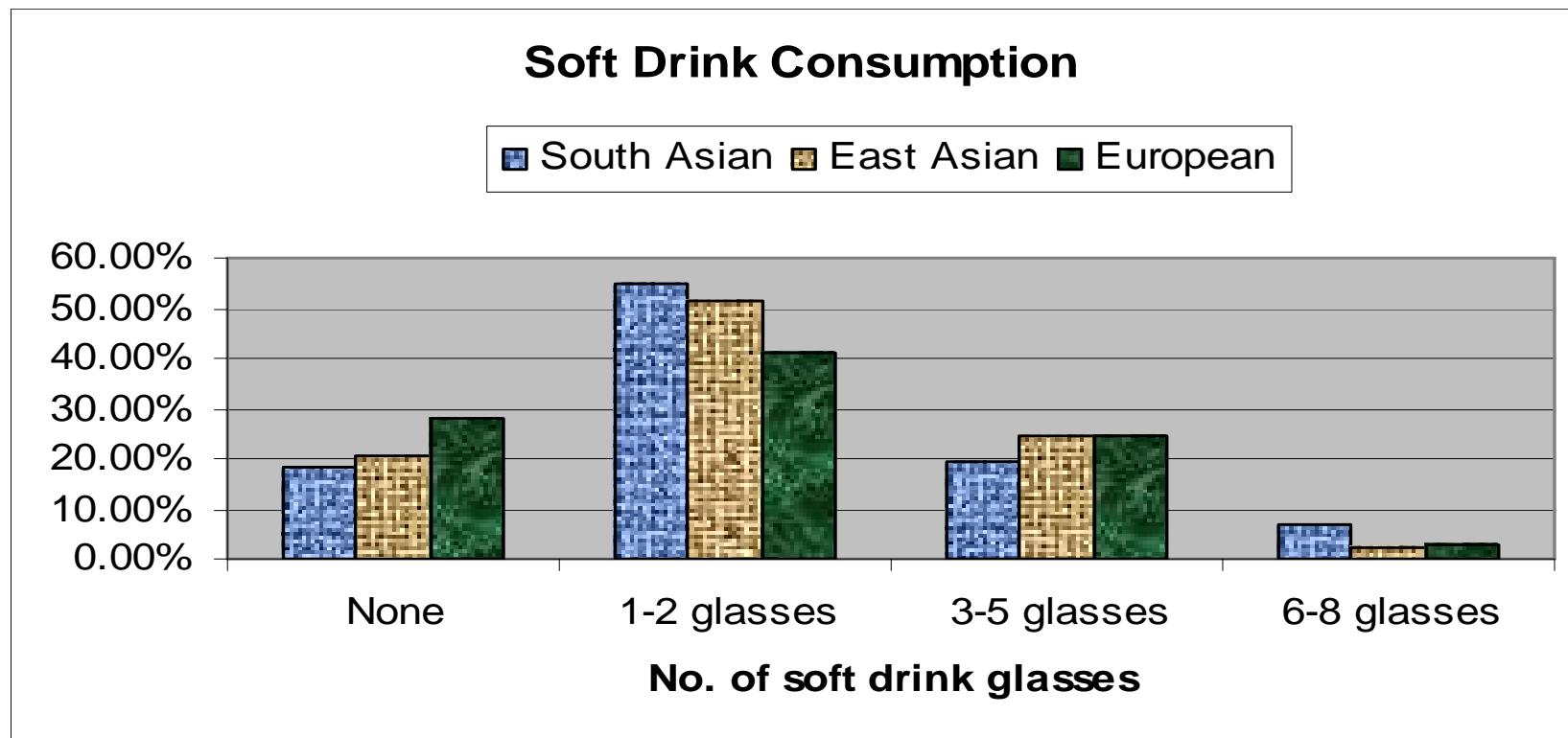
Serves of Fruits/Vegetables Eaten Each Day

Fruits (serve)	2-3
South Asian	32%
East Asian	53%
European	44%

Vegetables (serve)	2-3
South Asian	37%
East Asian	52%
European	60%

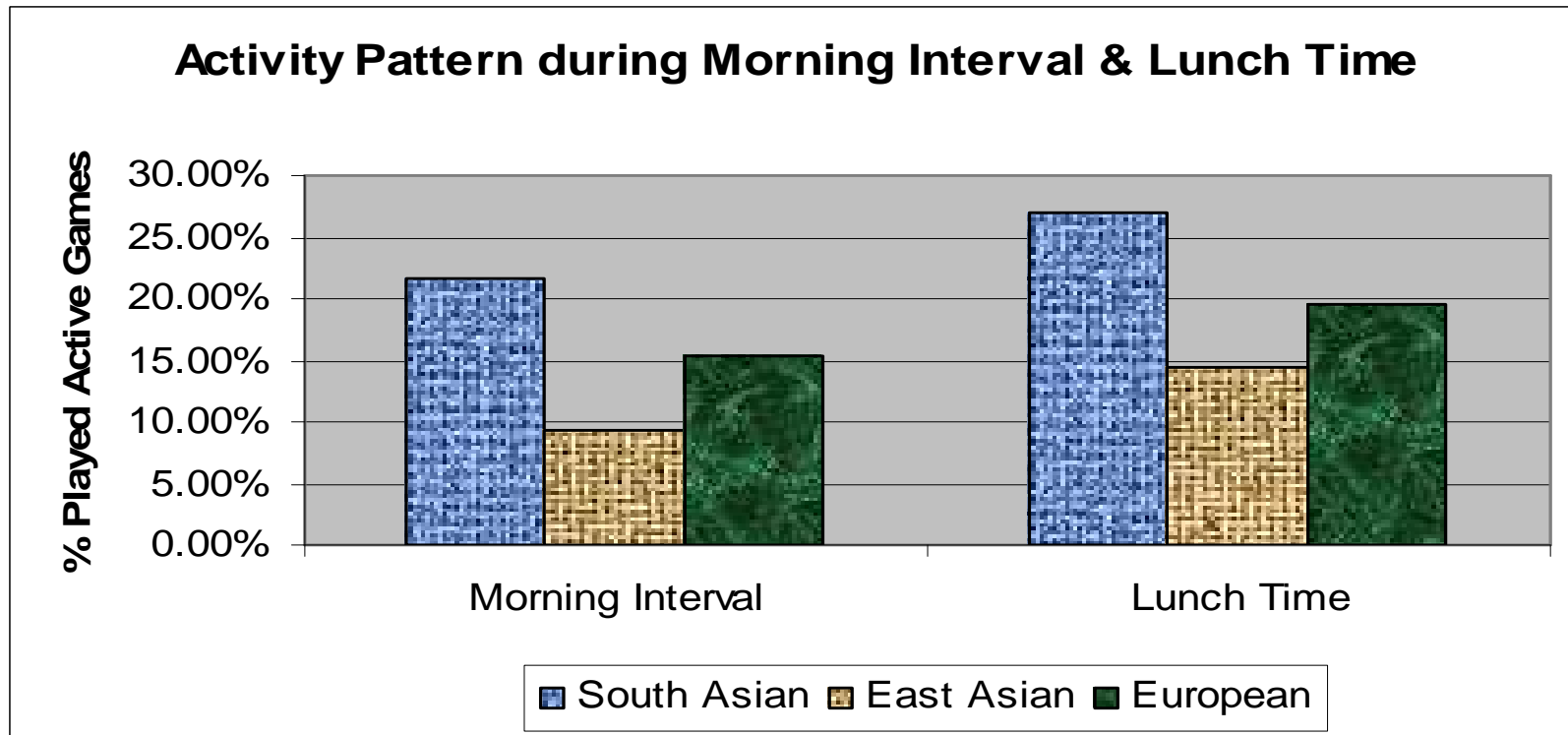
Analysis: Food Patterns

Glasses of Soft Drinks Consumed on the Last School Day



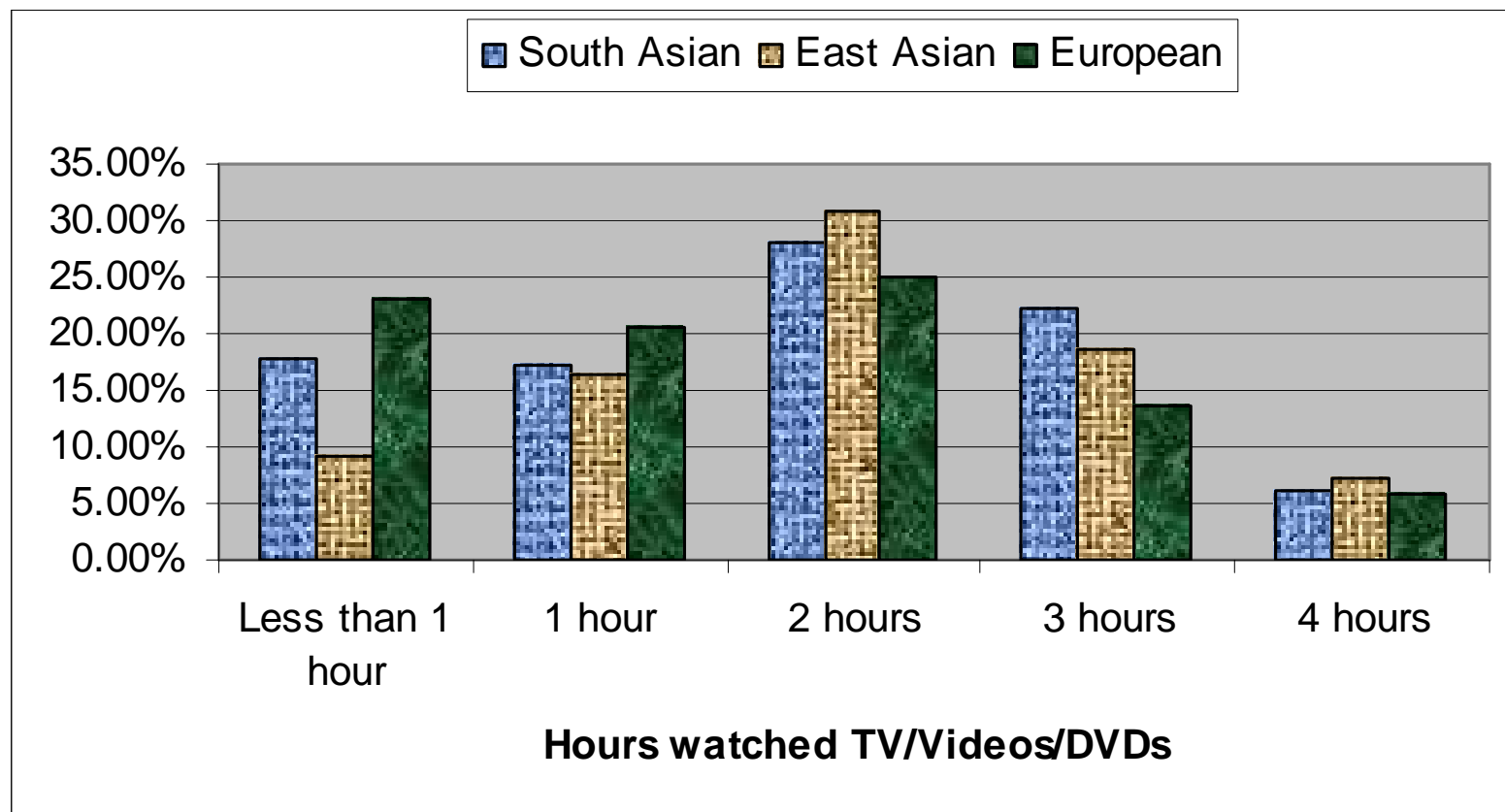
Analysis: Activity Patterns

Activity Pattern during Morning Interval and Lunch Time



Analysis: Activity Patterns

Hours Watched TV/Videos/DVDs on the Last School Day

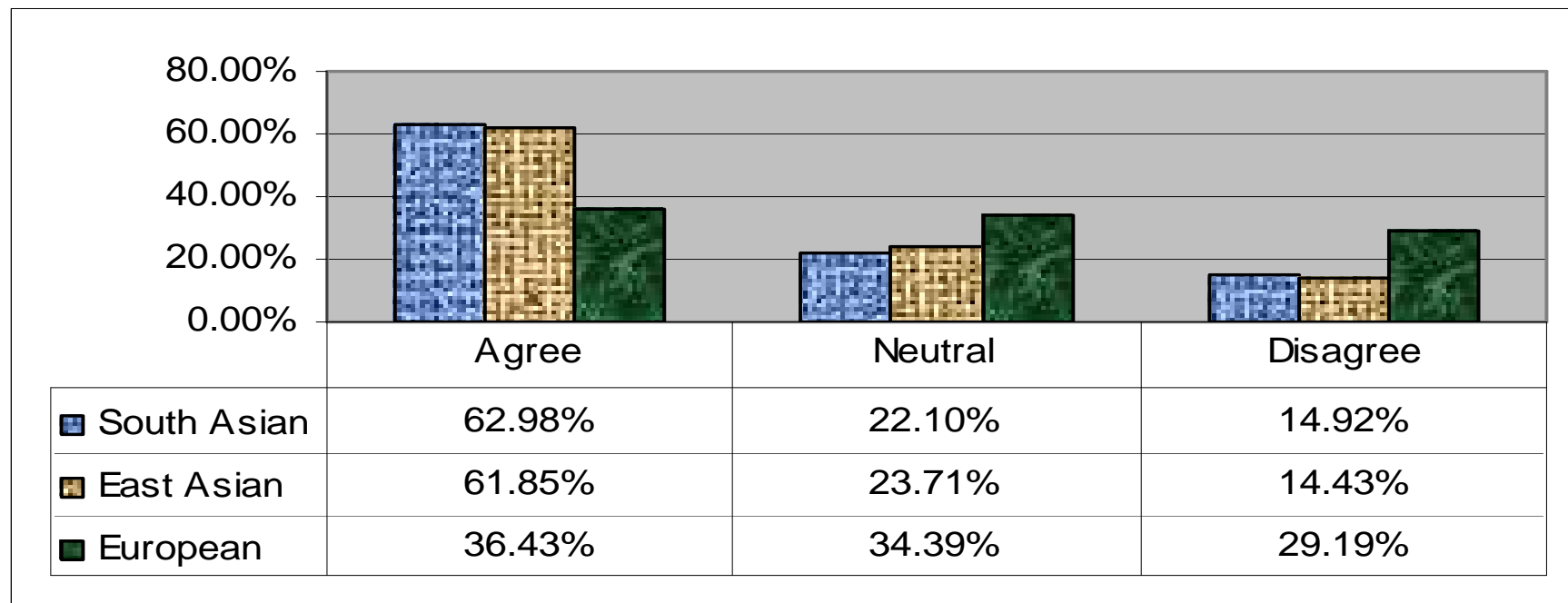


Analysis: Opinion & Knowledge

Question:

Fruit drinks and cordials have less sugar than non-diet soft drinks like Coke and Sprite

- Watching a lot of TV does not lead to weight gain
- Skipping breakfast or lunch is a good way to lose weight



Analysis: Opinions of Body Weight

Describe Weight	Underweight
South Asian	28%
East Asian	27%
European	18%

Weight	Trying to gain weight
South Asian	27%
East Asian	22%
European	11%

Focus Groups

Girls	Number of Students		
	East Asian	South Asian	European
13-15 year olds	4	4	4
16-18 year olds	4	4	4

Boys	Number of Students		
	East Asian	South Asian	European
13-15 year olds	4	4	4
16-18 year olds	4	4	4

Total: 48 students in 12 focus groups (46 participated)

Interview Schedule

Theme ONE: Food Patterns

- Q1:** What are your favourite foods? (Prompt: sugary drinks, takeaway food, etc)
Q2: What do you usually eat during school and where do you get it from?
Q3: What do you usually eat after school and where do you get it from?
Q4: What is the *traditional diet* of East/South Asians back in the country of origin? And in New Zealand?

Theme TWO: Activity Patterns

- Q5:** What are your hobbies? What do you do in your spare time or for fun? (Prompts: TV/video/computer games/sports/etc)
Q6: Do you get any exercise? What sort? How much?
Q7: Are there any *cultural considerations* that might influence your physical activities/recreation?

Theme THREE: Influencing Factors

- Q8:** How do you decide which food you eat every day? (Prompts: friends/school/teachers/money/cultural considerations/etc)
Q9: Does your family have an influence on your food choice?
Q10: Do you tend to like particular food if you are happy or sad? Or for special occasions?

Theme FOUR: Knowledge and Experience

- Q11:** How would you rate young people's (East Asians/South Asians/Europeans') knowledge of healthy food and what to eat?
Q12: Where do you think they get their knowledge from?
Q13: What do you know about heart health and its contributing factors?
Q14: Where do you get this information from?

Theme FIVE: Opinions on Practice

- Q15:** What would be a good way to get young people to eat healthy and become physically more active?
Q16: How can we engage the individuals and the community in these intervention programs?

Theme Six: Others

- Q17:** Is there anything else you would like to discuss in relation to a healthy lifestyle and maintaining a healthy weight?

Influencing Factors on Asian Adolescents' Eating Patterns and Exercise Habits

- Family and friends
- Media and advertisements
- Food availability, convenience, money
- Knowledge

- Cultural considerations
- School

Opinions on Practice

Q15: What would be a good way to get young people to eat healthy and become physically more active?

Q16: How can we engage the individuals and the community in these intervention programs?

What is Health Promotion?

- Health promotion is “the process of enabling people to increase control over, and to improve, their health”
 - Building healthy public policy
 - Creating supportive environments
 - Strengthening community action
 - Developing personal skills
 - Reorienting health services
- Ottawa charter (1986)

2 types of HP

- Bottom-up: set by people themselves identifying issues they perceive as relevant
- Top-down: set by health promoters who have the power and resources to make decisions

What is Community Engagement?

- involving the members of groups and 'communities of interest' in problem-solving solutions to issues that affect their lives
- a collaborative process between the outside agency and their clients

What is Empowerment?

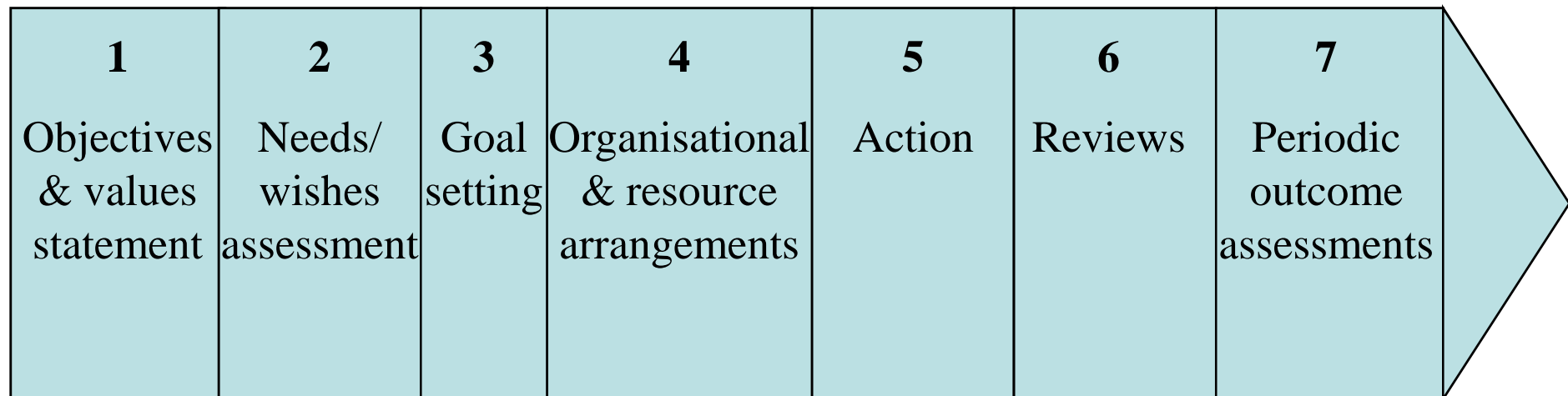
- a process by which people work together to increase control over events that influence their lives
- three different levels of empowerment: individual; community; and organisational

Key Difference

- Community Engagement is concerned with the active involvement of people and capacity building. Their activities may, or may not, include social and political action
- Community Empowerment has the explicit intention of bringing about social and political change (legislative) as an outcome

The PEOPLE System

Planning and Evaluation of People-Led Endeavours



Challenges of Community Engagement

- Problem/needs assessment
- Develop and maintain the trust of communities
- Language/Culture
- **Community readiness**
- Participation
- Resource mobilization

Summary

- Asian adolescents are **NOT** less likely to be overweight/obese
- They exhibit problematic nutritional behaviour
- They illustrate inaccurate knowledge of weight related issues
- These in addition to becoming in contact with an 'obesogenic' environment of the type found in New Zealand, may lead to weight concerns later in their life

People and Community Centred Programmes

- Individuals and Communities need to be involved in:
 - Identifying needs/risk factors
 - Planning
 - Action & Implementation
 - Evaluation
 - Maintenance

Opinions of NZ-Asian Youth on Practice

- Government
 - monitoring the media (programmes & ads)
 - monitoring the school canteen
 - monitoring the cost of healthy food
- School
 - monitoring the school canteen
 - offering enjoyable & interactive educational health & nutrition programmes & activities/competitions
- Family
 - provide support & be involved
 - need access to reliable information

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