



SASKATOON* *IN MOTION*
PHYSICAL ACTIVITY SURVEY

IN MOTION NATIONAL PHYSICAL ACTIVITY
INSTITUTE
AUGUST 26-27 2010
SASKATOON, SK

Physical Activity Survey



- Five biennial surveys have been conducted with Saskatoon residents since 2000

Objectives



- To explore current physical activity levels of Saskatoon and region residents and measure how physically active they were according to federal health guidelines

- Questionnaire designed to enable respondents to
 1. describe all of the leisure physical activities they participated in during the seven days previous to the survey
 2. how many times they participated in each of them
 3. duration of each

Sample Frame



- The Saskatoon Health Region is the largest health region in Saskatchewan serving approximately 300,000 residents

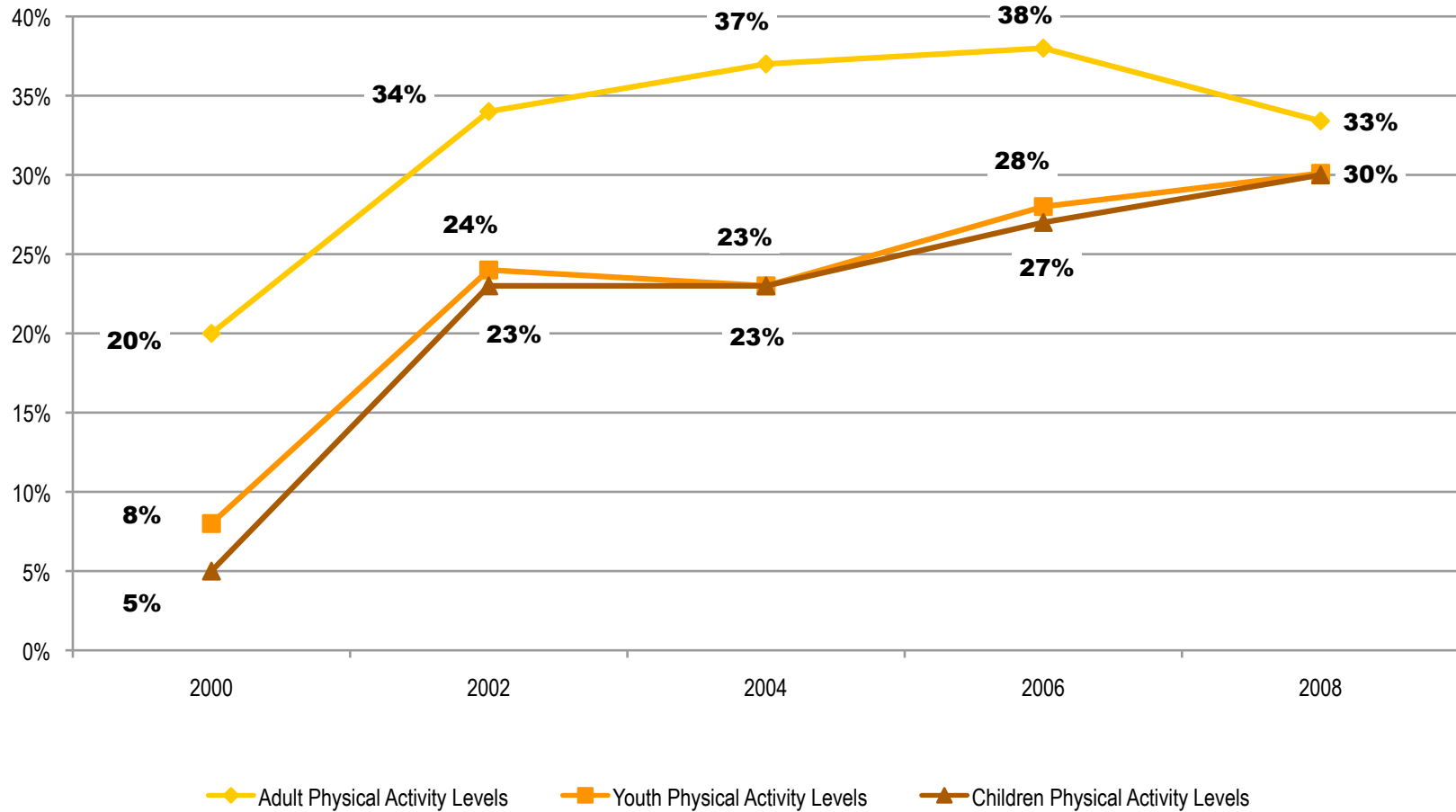
Sample Frame


	2000	2002	2004	2006	2008
Total Sample	1,745	2,037	1,627	1,673	1,706
Rural	-	-	508	482	330
Urban	1,745	2,037	1,119	1,191	1,095
Children & Youth	299	337	364	300	281
Adults	1,446	1,700	1,160	1,373	1,425

Data Analysis

- Data obtained from the questionnaire was combined to compute each participant's total KKD (kilocalories per kilogram per day) value for the previous week
- Adults - energy expenditure value greater than or equal to 3 KKD = health benefits
- Children and youth - energy expenditure greater than or equal to 8 KKD = health benefits

Overall Physical Activity Levels for Health



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- Approximately 33% of Saskatoon and region adults were considered physically active enough to receive health benefits in 2008, a decrease from 38% in 2006
 - Weather during the survey
 - Time of the survey
 - Marketing to specific segments

 - However, children and youth cohorts increased their physical activity levels since 2006

Types of Activities

- Types of Activities - The most frequently reported physical activity for exercise was walking
 - adults (69%)
 - youth (64%)
 - children (67%)
- Walking for exercise increased significantly over all age cohorts since 2006



Youth and Children



- 30% of Saskatoon and region **youth** residents are physically active for health benefits (2008), slight increase from 28% in 2006

- 30% of Saskatoon and region **child** residents are physically active for health benefits (2008), slight increase from 27% in 2006

It's all in the family....

- In 2008, **58%** of Saskatoon and region **youth** physically active enough to receive health benefits also had **parents** who were physically active enough to receive health benefits
- In 2008, **73%** of Saskatoon and region **children** physically active enough to receive health benefits also had **parents** who were physically active to receive health benefits



Advertising Awareness and Recall

- More than three quarters (**79%**) of Saskatoon and region adults recalled recently ***seeing, hearing or reading advertising messages*** promoting awareness of the benefits of physical activity
- More than one-half (**66%**) of adults ***recalled advertising messages about in motion***
- Approximately **59%** of those adults who ***recalled in motion advertising*** felt the messages from the campaign **encouraged them to think about becoming more physically active in order to receive physical health benefits**

Conclusion



- Overall physical activity among the Saskatoon and region adults is slightly down from the 2006
- Physical activity among youth and children has increased slightly
- Maybe time to consider other factors – Lessons learned

Assume Physical Activity is **Stable**

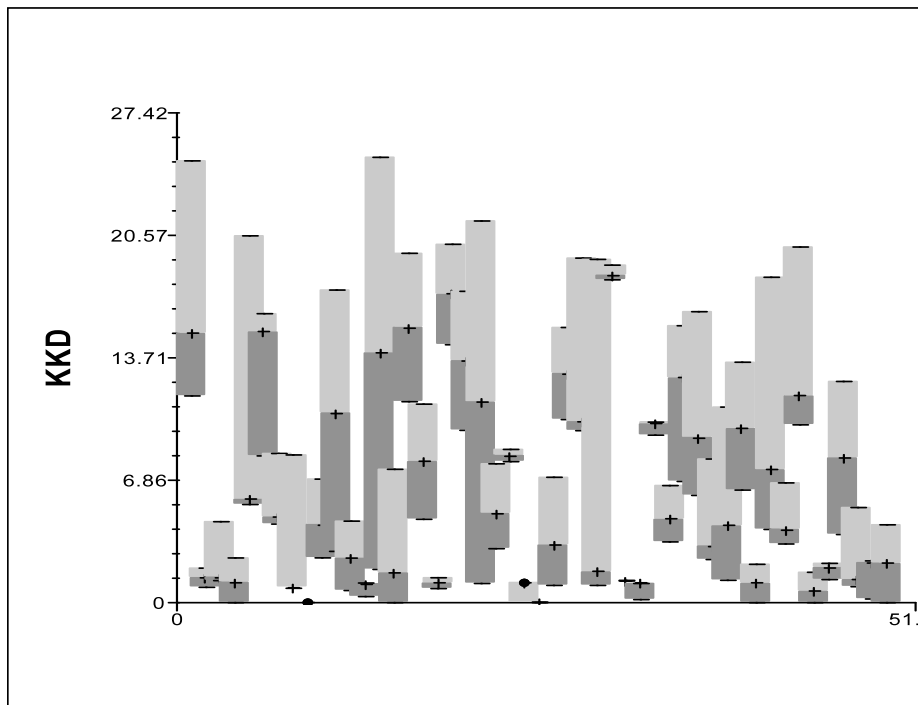
- Activity assessed at one time reflects activity at other times
 - Cross-sectional studies



Variability is the norm

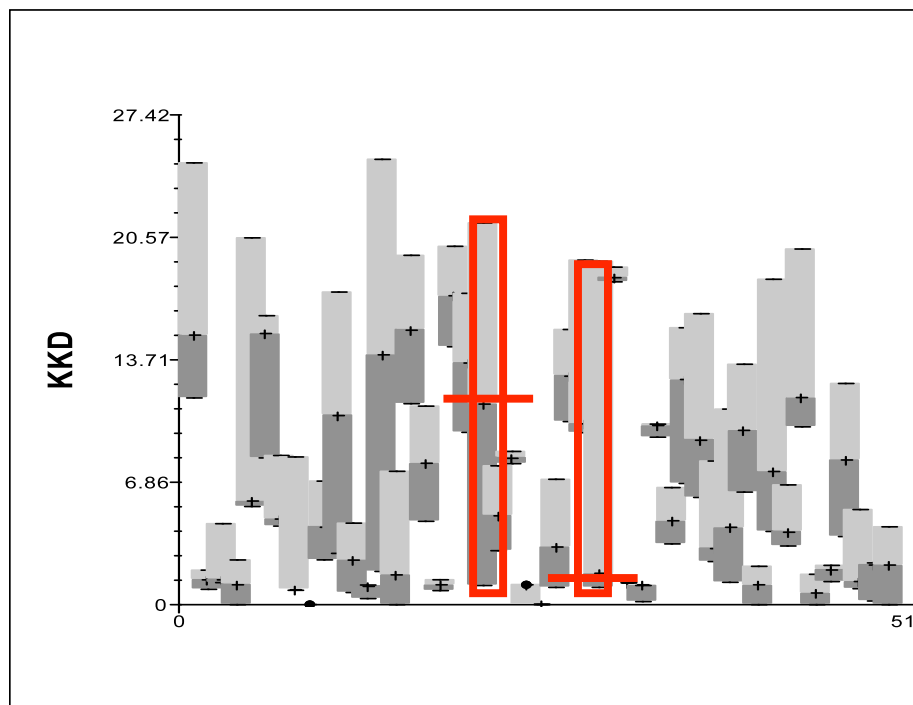
- ❑ 500 HS students followed over the course of a school year
- ❑ **72%** of those who were active at the start of the school year reported a decrease in activity to a level where they were no longer attaining health benefits (i.e., < 4 KKD) 1994) at some point during the remainder of the school year (Spink et al., 2006)
- ❑ **<10%** maintained sufficient activity over the year

Variability in PA



ICC = .43

Variability in PA

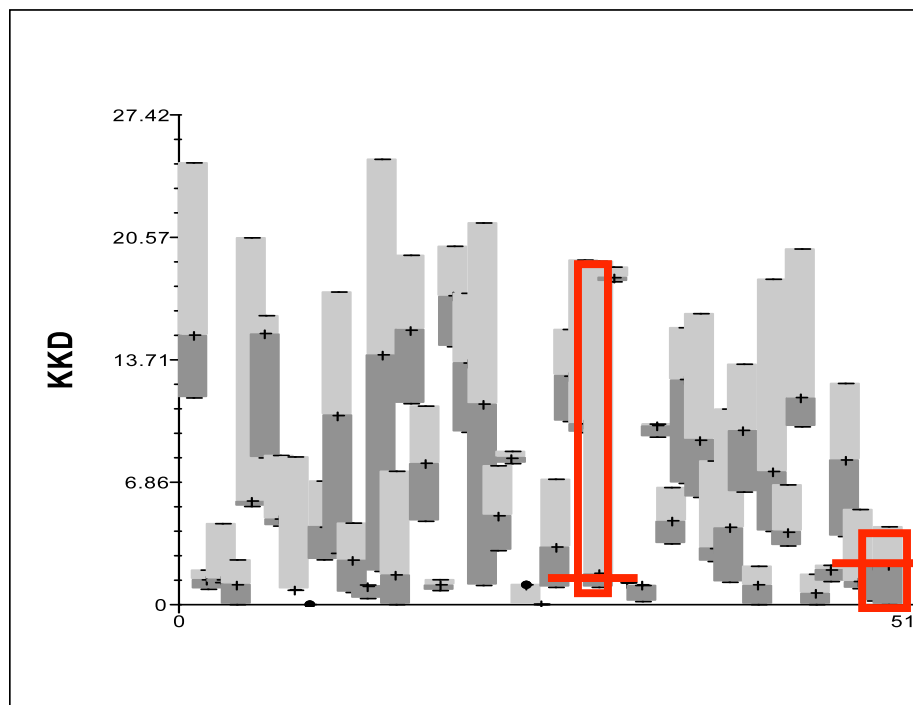


□ mean level for each individual

□ deviation from individual's mean level

ICC = .43

Variability in PA



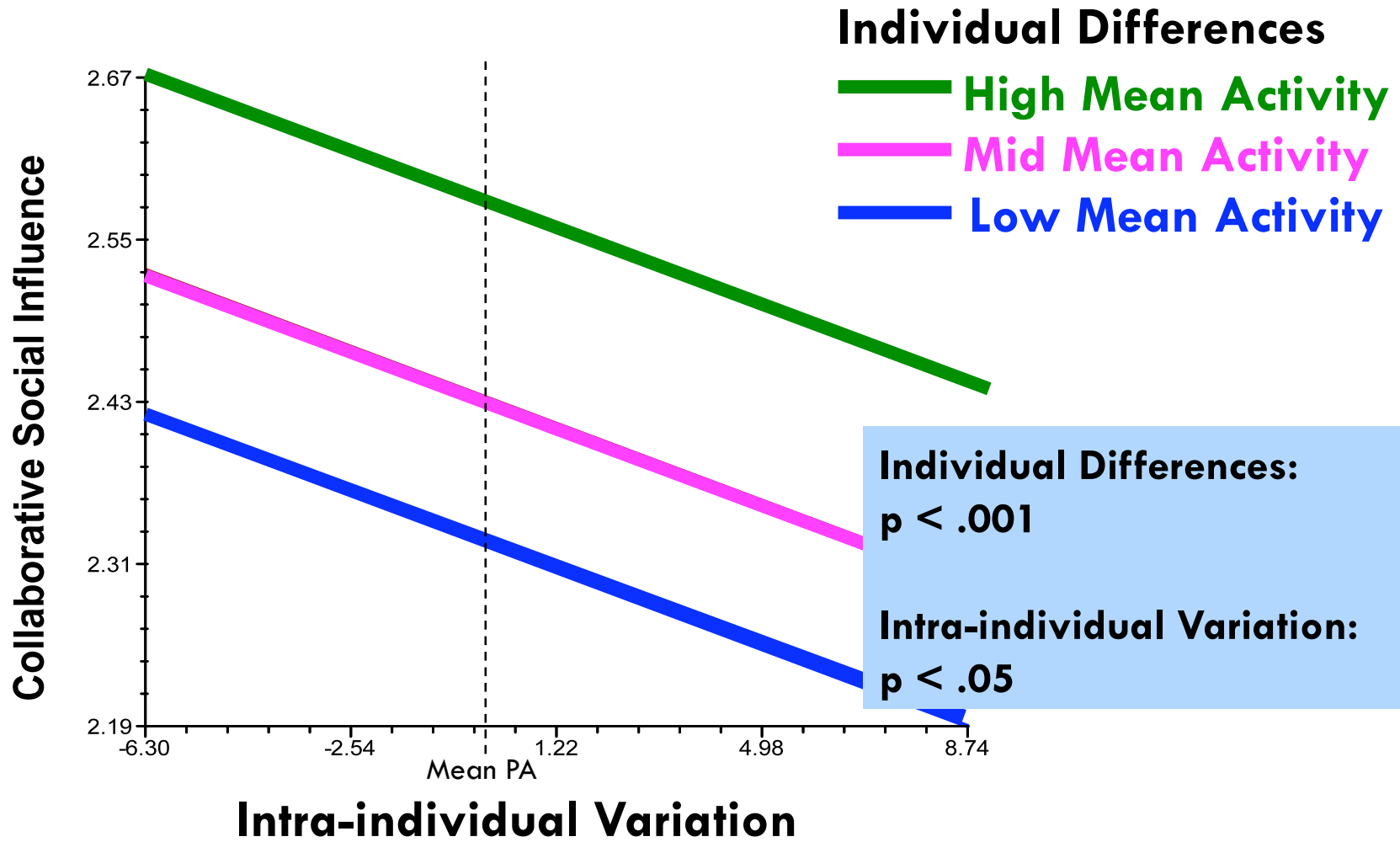
□ mean level for each individual



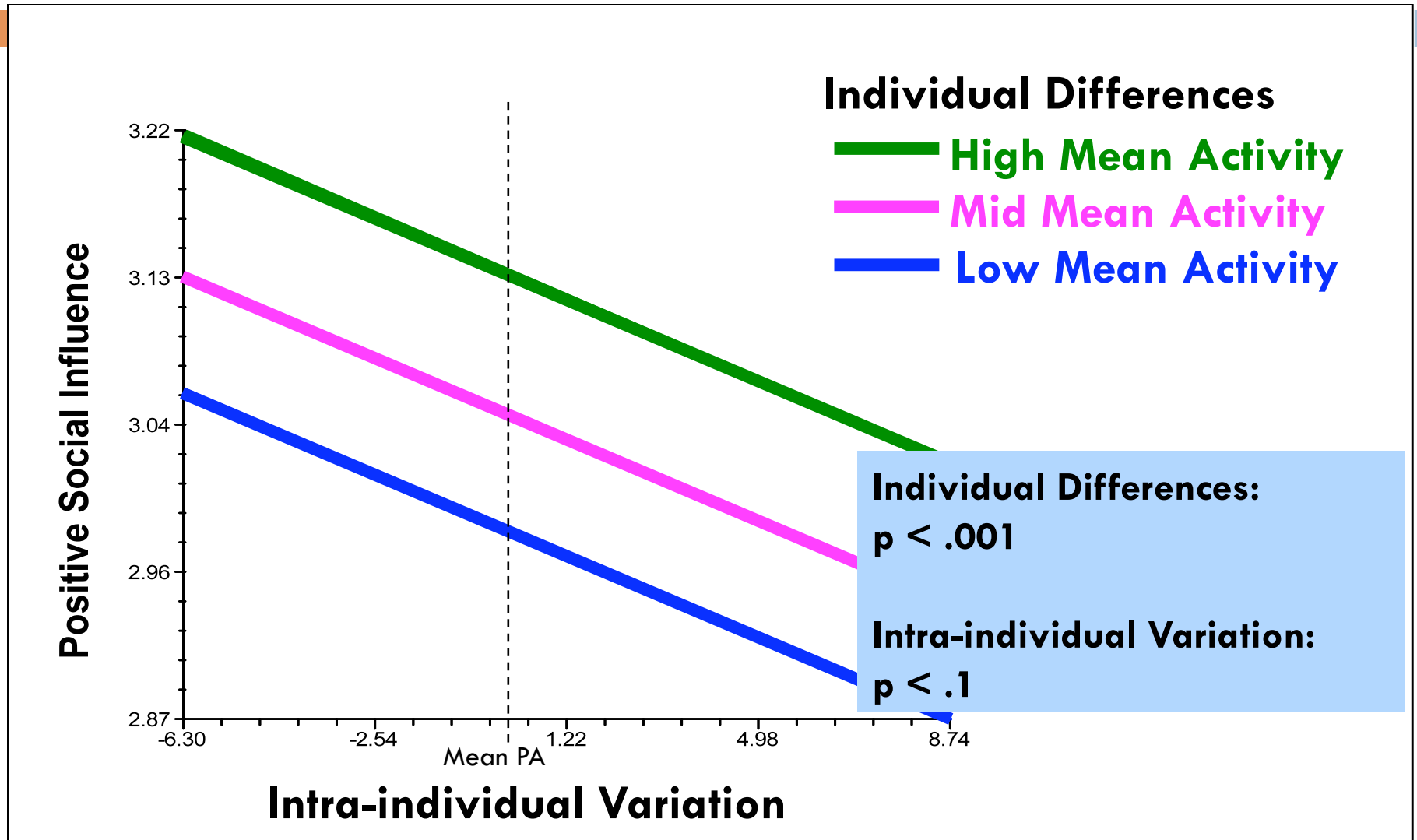
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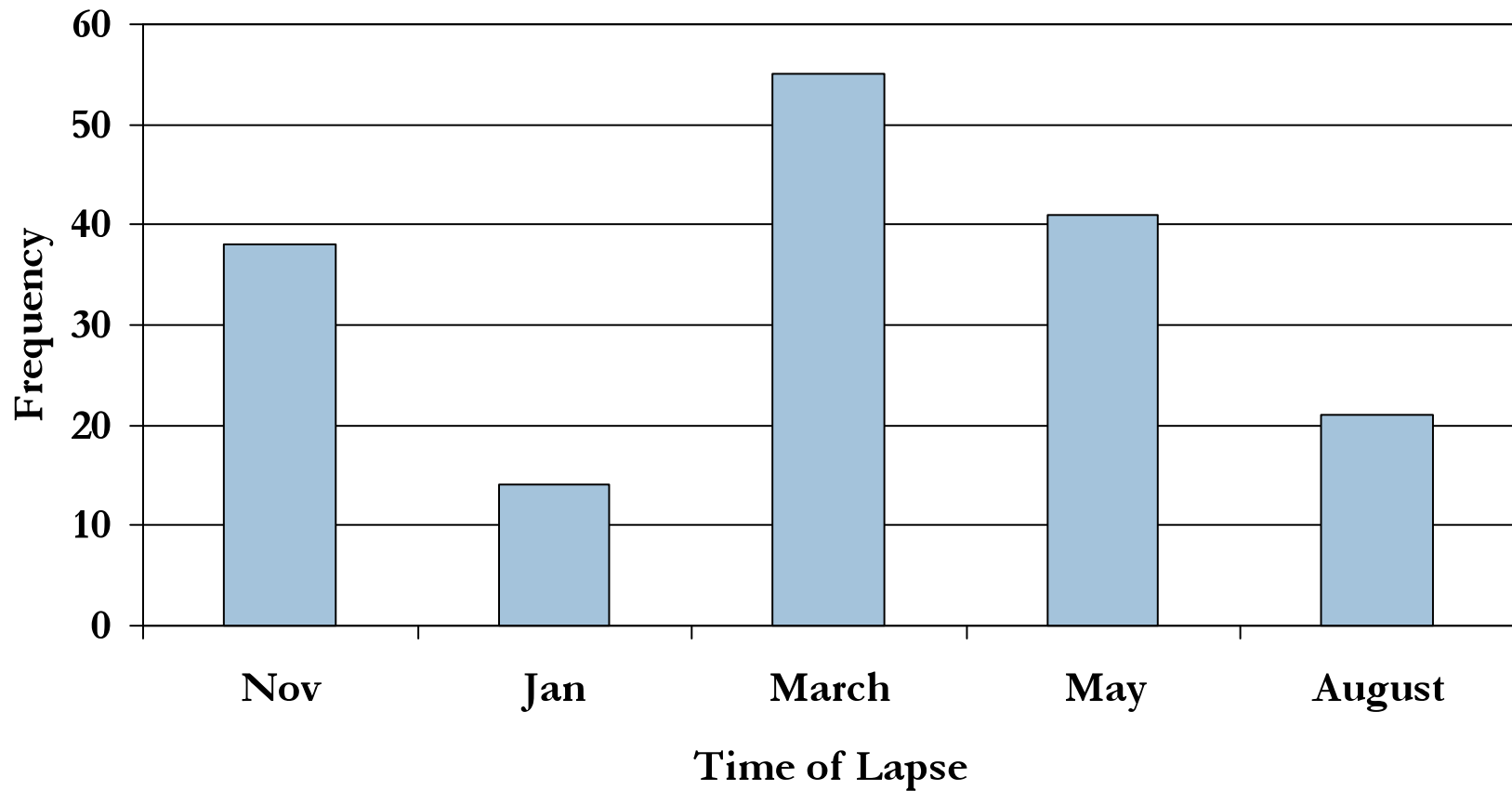
Collaborative Social Influence



Positive Social Influence



Time Period of Lapses – Capture/ Intervention



One Size Does Not Fit All



Information versus motivation



- Almost 80% of adults recalled recently ***seeing, hearing or reading advertising messages*** promoting awareness of the benefits of physical activity
 - Message is already out there?
 - Motivation for reasons other than health?
 - Different strokes for different folks?

BY PERSON Correlates of Physical Activity Level (High: > 8 KKD versus Low: < 2 KKD) Among Adolescents (n = 330)^{1, 3} (Spink et al., 2005)

Variable		B	Sig	OR²	(95% CI)
<i>Self- reported health</i>	Excellent, Very good, Good, Fair, Poor	.576	.001	1.779	(1.25, 2.52)
<i>Quality of home life</i>	Very good, Some problems, Serious problems, Very poor	.717	.008	2.047	(1.20, 3.47)
<i>Time spent in sedentary activities</i>	None, 1 hour or less, 2 to 3 hours, 4 to 5 hours, 6 or more hours	.409	.009	1.505	(1.10, 2.04)
Number of different activities		.837	.000	2.30	(1.91, 2.78)

¹Hosmer-Lemeshow goodness of fit test, $p > .348$ ($\chi^2 = 8.929$, $df = 8$).

²OR = Odds Ratio

³Classification; Low physical activity = 82.4%, High physical activity = 87.2%, Overall = 85.2%

BY SETTING Frequencies of participants indicating correlates as associated with participation *in structured, unstructured or both*
 Note. ¹ Percentages are based on the total sample (N = 153) (Spink et al., 2006)

<i>Correlate</i>	<i>Structured only</i>	<i>Unstructured Only</i>	<i>Both</i>
Parent support	36 (23%) ¹	7 (5%)	19 (12%)
Coach support	34 (22%)	8 (5%)	5 (3%)
Friend together	14 (9%)	56 (37%)	14 (9%)
Enjoyment	48 (32%)	24 (16%)	28 (18%)
Perceived competence	60 (39%)	4 (3%)	5 (3%)

Thank You

