

# The Use of QOL Theories in the Development of QOL National and Community Indicators Projects

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# Reference

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Most of the theoretically-based QOL indicators projects can be classified in terms of six major theoretical concepts: (a) socio-economic development, (b) personal utility, (c) just society, (d) human development, (e) sustainability, and (f) capability/functioning. I explain the core aspects of these six theoretical paradigms and show how they help guide QOL researchers to select and develop QOL indicators that are significantly and qualitatively distinct. Thus, a taxonomy of QOL indicators guided by a given theoretical concept is likely to be very different from others taxonomies guided by different theoretical concepts. Thus, the objective of this paper to explain these theoretical paradigms and show how they guide QOL researchers to select and develop QOL indicators that are significantly and qualitatively distinct.

# The Concept of Socio-Economic Development

- Many community planners believe that their basic mission is essentially **economic development**. This is because economic development is the foundation for social development. When a community achieves satisfactory levels of economic development, social development follows.
  
- Therefore, community indicators projects guided by the opulence concept collect data on economic indicators such as household income, unemployment, type of jobs, quality of jobs, cost of living, poverty, and homelessness

**Socio-  
economic  
development**



**QOL**

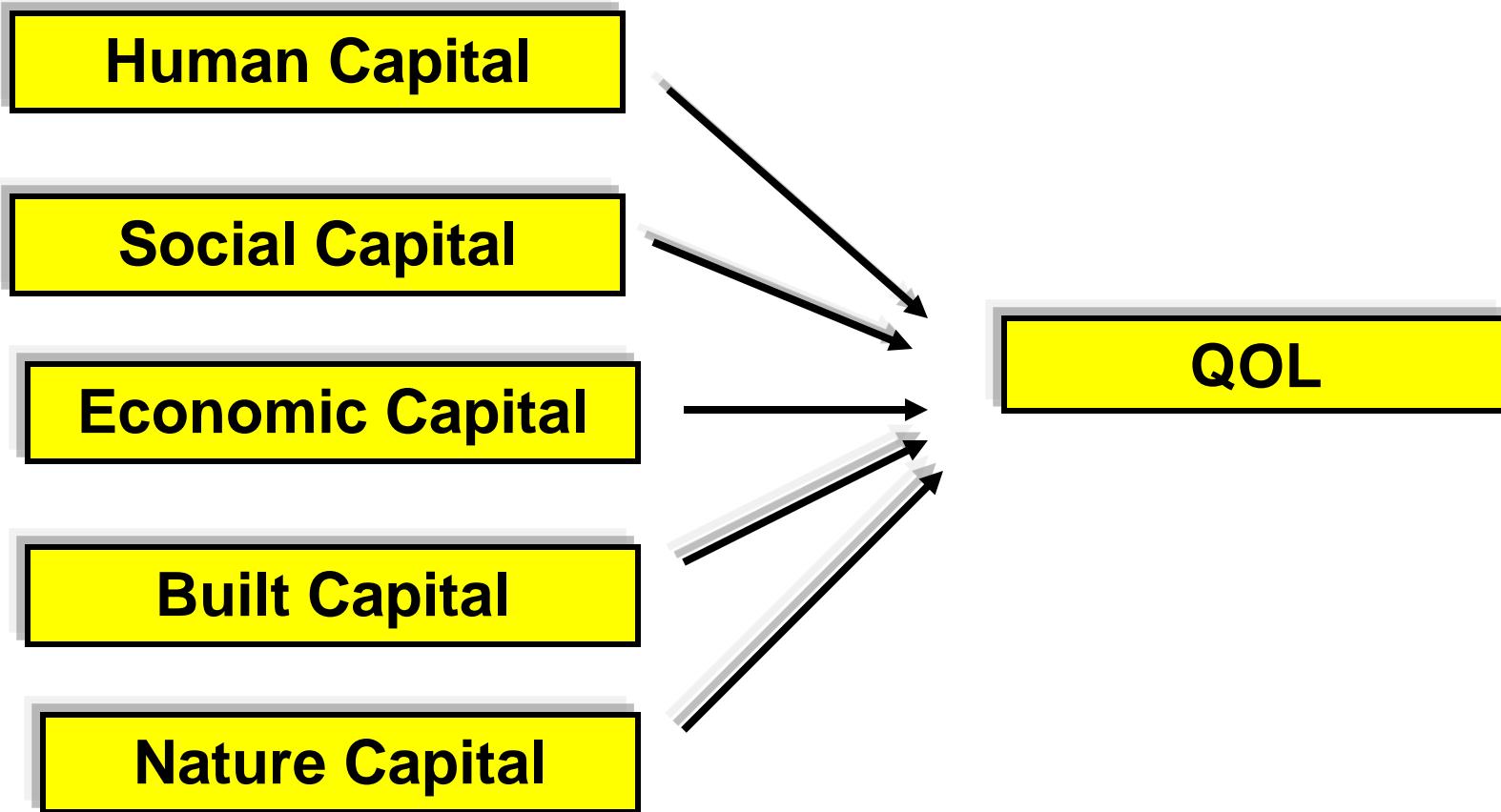
# **SOCIO-ECONOMIC DEVELOPMENT**

## **Socio-Economic indicators of a community, state, or nation**

- Household income
- Unemployment
- Type of jobs
- Quality of jobs
- Cost of living
- Poverty
- Homelessness

# A More Liberal View of Socio-Economic Development

- Socio-economic development can be viewed broadly in terms of:
  - Financial or economic capital
  - Human capital,
  - Social capital,
  - Built capital, and
  - Natural capital (Anielski, 2007).



**CAPITAL**

<p><b><u>Human capital</u></b></p> <ul style="list-style-type: none"> <li>• <b>Health and wellness:</b> life expectancy, mortality rate, infant mortality, low birth weight babies, teen birth rate, tobacco use, suicide rate, auto crash mortality rate, etc.</li> <li>• <b>Recreation and leisure:</b> physical activity, affordable recreational activities, etc.</li> <li>• <b>Work:</b> labor force participation rate, employment rate, unemployment rate, etc.</li> <li>• <b>Time use:</b> unpaid work, unpaid household work, unpaid parenting, unpaid eldercare, etc.</li> <li>• <b>Education &amp; learning:</b> educational attainment, high school drop out rate, average class sizes, etc.</li> </ul>	<p><b><u>Social Capital</u></b></p> <ul style="list-style-type: none"> <li>• <b>Diversity:</b> ethnic diversity, population that is foreign-born, etc.</li> <li>• <b>Trust and sense of belonging:</b> trust of neighbors, neighborliness, community organizations, etc.</li> <li>• <b>Safety &amp; crime:</b> violent crime, property crime, drug crime, motor vehicle collision rate, etc.</li> <li>• <b>Equity &amp; fairness:</b> income gap between top and bottom income households, ratio of female earnings to male earnings, etc.</li> <li>• <b>Community vitality:</b> number of cultural community events, attendance of public forums, etc.</li> <li>• <b>Citizenship:</b> voter turnout on elections, etc.</li> </ul>
<p><b><u>Economic &amp; financial capital</u></b></p> <ul style="list-style-type: none"> <li>• <b>Economic vitality:</b> GDP per capita, GDP annual growth rate, housing starts, building permit value per capita, etc.</li> <li>• <b>Living standards:</b> median income, average household expenditures as % of income, incidence of low income households, dependency on entitlement programs, etc.</li> <li>• <b>Affordable housing:</b> average value of dwelling, property taxes per person, demand for subsidized housing, etc.</li> <li>• <b>Affordable &amp; efficient gov't:</b> municipal gov't expenditures per citizen, municipal tax rates, etc.</li> </ul>	<p><b><u>Built Capital</u></b></p> <ul style="list-style-type: none"> <li>• <b>Public &amp; private infrastructure:</b> private dwellings, growth in # of dwellings per 100 people, % of dwellings requiring major repairs, municipal gov't spending on transportation infrastructure, recreation facility venues, bike and walking trails, public transit expenditures by municipal gov't per capita, etc.</li> </ul>
<p><b><u>Natural Capital</u></b></p> <ul style="list-style-type: none"> <li>• <b>Ecological footprint:</b> demand on natural capital vs. nature's supplies, ratio of ecological footprint to land, etc.</li> <li>• <b>Population density:</b> people per sq km, etc.</li> <li>• <b>Sustainable food production:</b> % of food grown and sourced locally, prime agricultural land per person, etc.</li> <li>• <b>Natural environment:</b> green space, forest cover, water quality, air quality, greenhouse gas emissions, etc.</li> <li>• <b>Consumption &amp; conservation:</b> water consumption, water storage per citizen, residential waste per capita, etc.</li> </ul>	

# A Psychological View of Socio-Economic Development: Stocks and Flows

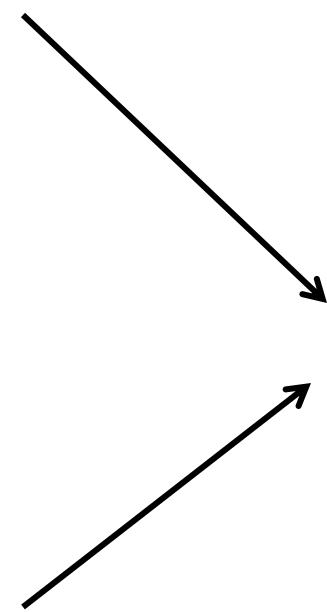
Headey (1993) development the concept of stocks and flows in QOL studies. In financial terms, stocks constitute capital account whereas flows make up the current account.

- **Stocks** reflect the strength of one's personality (high on extraversion and low on neuroticism), health (positive versus negative health status), social networks (partnered, availability of intimate attachments and friendships), leisure skills and equipment, work skills and equipment, education and general knowledge, and socio-economic status.
- **Flows** are satisfaction or dissatisfaction experienced in relation to daily activities in the context of various life domains such as finances, leisure, family, job, friendships, and health.

**Stocks**

**Flows**

**QOL**

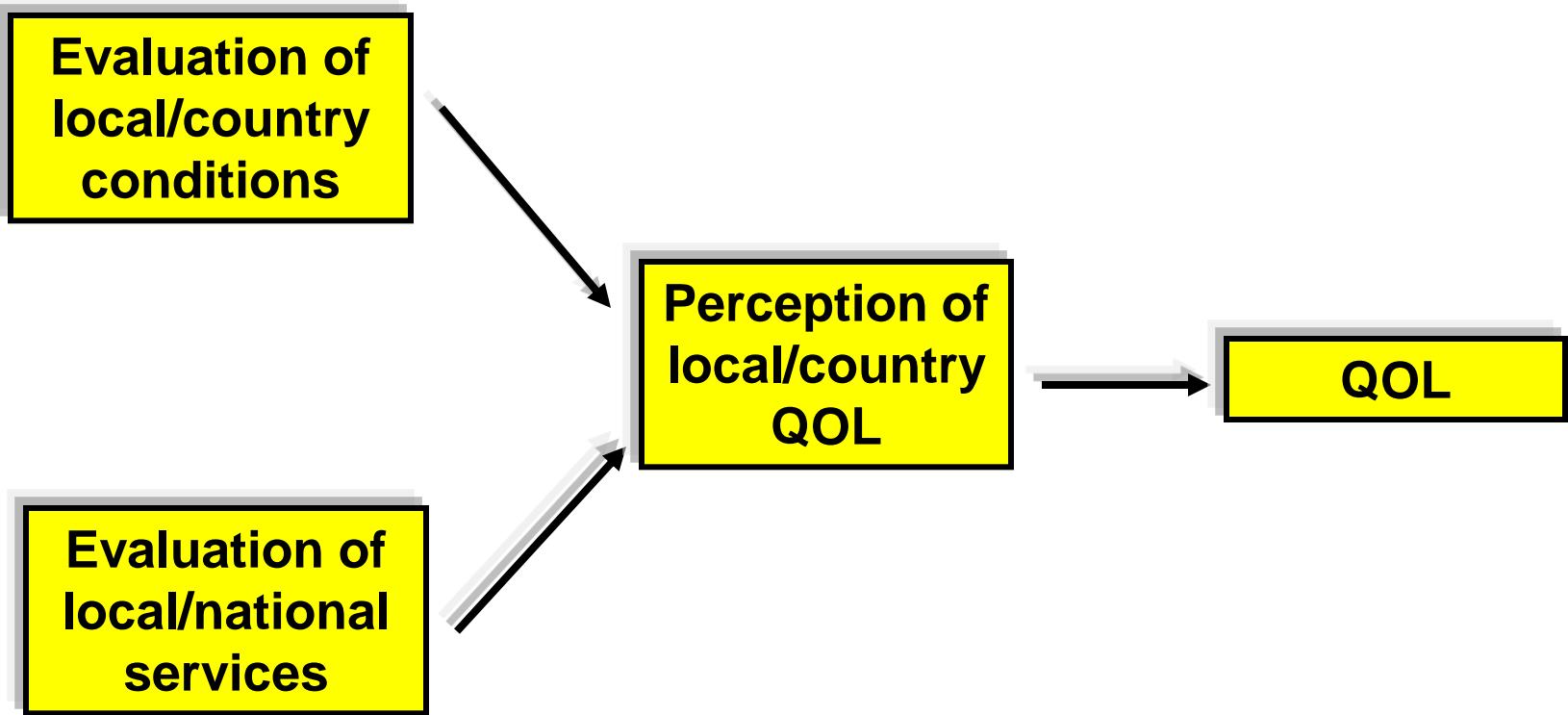


**STOCKS AND FLOWS**

<b><u>Stocks</u></b>	<b><u>Flows</u></b>
<p><input type="checkbox"/> <b><u>Personality indicators</u></b> (e.g., extraversion, neuroticism, self-esteem)</p> <p><input type="checkbox"/> <b><u>Health indicators</u></b> (e.g., physical health, mental health, quality of healthcare)</p> <p><input type="checkbox"/> <b><u>Social indicators</u></b> (e.g., marriage, divorce, widowhood, co-habitation, number of friends, quality of friendship, quality of romantic relationship)</p> <p><input type="checkbox"/> <b><u>Socio-economic indicators</u></b> (e.g., household income, source of income, occupational status, level of education, quality of housing and neighborhood)</p> <p><input type="checkbox"/> <b><u>Leisure/recreation indicators</u></b> (e.g., amount of leisure time, quality of leisure time, availability of resources for leisure, availability of leisure programs in the community, access to these programs)</p> <p><input type="checkbox"/> <b><u>Work/education indicators</u></b> (e.g., level of education and training, work experience, availability of educational and training programs in the community, access to these program)</p>	<p><input type="checkbox"/> Work satisfaction</p> <p><input type="checkbox"/> Family satisfaction</p> <p><input type="checkbox"/> Marital/love satisfaction</p> <p><input type="checkbox"/> Leisure/recreation satisfaction</p> <p><input type="checkbox"/> Financial satisfaction</p> <p><input type="checkbox"/> Spiritual satisfaction</p> <p><input type="checkbox"/> Intellectual satisfaction</p> <p><input type="checkbox"/> Housing satisfaction</p> <p><input type="checkbox"/> Neighborhood satisfaction</p> <p><input type="checkbox"/> Transportation satisfaction</p> <p><input type="checkbox"/> Community satisfaction</p> <p><input type="checkbox"/> Culinary satisfaction</p> <p><input type="checkbox"/> Satisfaction with body image</p> <p><input type="checkbox"/> Satisfaction with friends</p> <p><input type="checkbox"/> Health satisfaction</p> <p><input type="checkbox"/> Satisfaction with healthcare</p> <p><input type="checkbox"/> Satisfaction with childcare</p> <p><input type="checkbox"/> Satisfaction with elderly care</p>

# The Concept of Personal Utility

The basic premise is that a community rated high on quality-of-life dimensions is a community that has **conditions** and **services** that satisfy the needs of community residents.



**PERSONAL UTILITY**

<b><u>Local/National Conditions</u></b>	<b><u>Local/National Services</u></b>
<p><input type="checkbox"/> <b><u>Economic conditions</u></b> (e.g., job opportunities, quality of jobs, income and wealth, cost of living)</p> <p><input type="checkbox"/> <b><u>Social conditions</u></b> (e.g., crime and public safety, racial/ethnic relations, social cohesion, education, leisure and recreation)</p> <p><input type="checkbox"/> <b><u>Physical conditions</u></b> (e.g., incidence of disease, air pollution, noise pollution, land pollution, water pollution, population density, traffic and congestion)</p>	<p><input type="checkbox"/> <b><u>Government services</u></b> (e.g., police, fire, refuse, water, transportation, healthcare, education, social services, job training)</p> <p><input type="checkbox"/> <b><u>Nonprofit services</u></b> (e.g., religious, healthcare, social services, education)</p> <p><input type="checkbox"/> <b><u>Business services</u></b> (e.g., banking, shopping malls, department stores, drug stores, supermarkets, automotive)</p>

# Mini-theories of Personal Utility

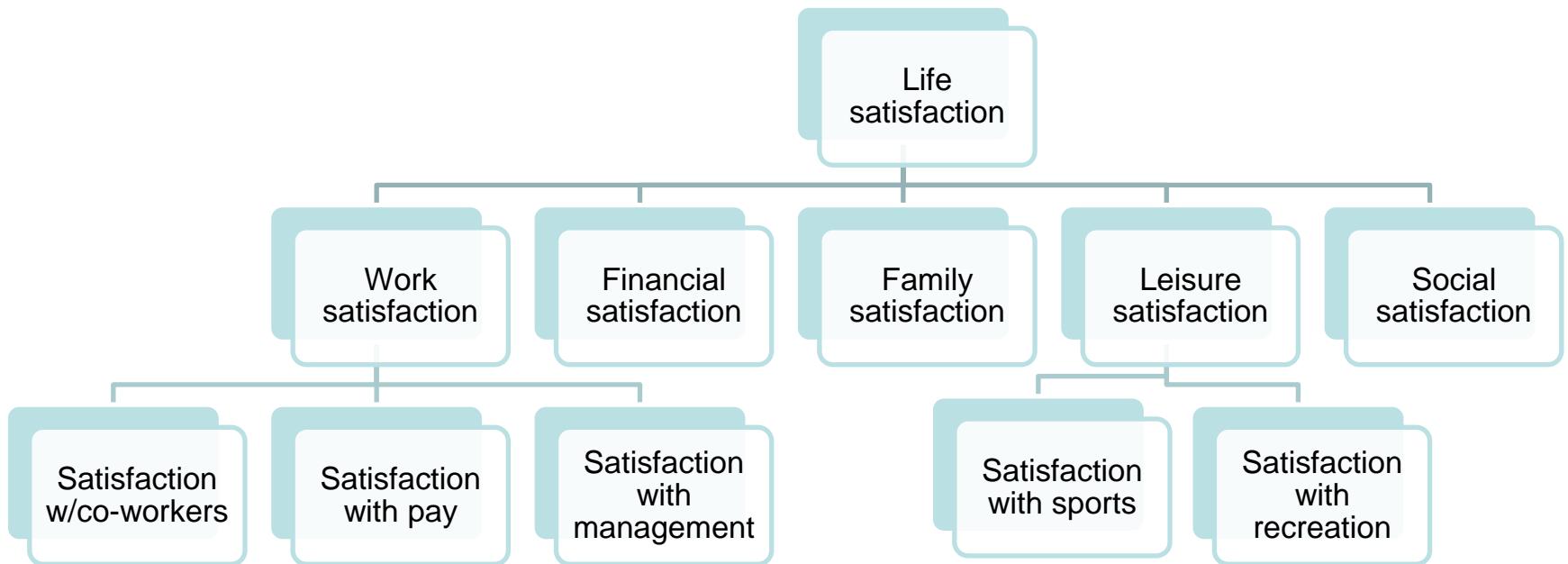
Several mini-theories subsumed under the big umbrella of personal utility theory have gained much popularity in the last 30 years or so. These include:

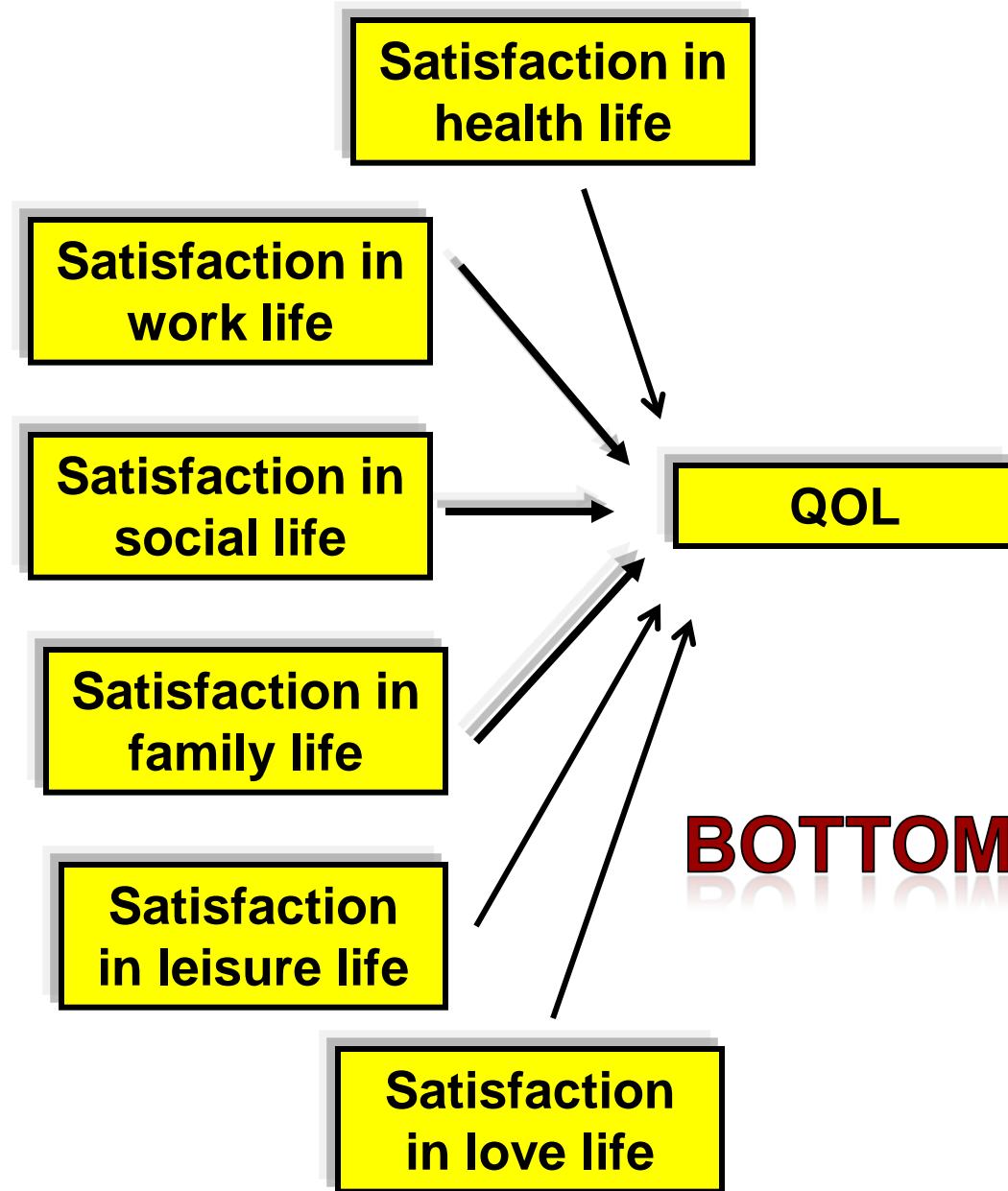
- bottom-up spillover theory,
- hedonic psychology,
- social judgment theory,
- positive/negative affect,
- human flourishing,
- flow and engagement, and
- purpose and meaning in life.

# The Concept of Bottom-up Spillover

**Bottom-up spillover theory** underscores the notion that overall global evaluations of life satisfaction are a function of evaluations made in various life domains such as family life, social life, leisure life, financial life, community life, spiritual life, and so on. In other words, evaluations of life domains influence the evaluation of life overall, especially important life domains. For example, if a person views work life as very important, overall evaluation of work life is likely to influence his/her overall evaluation of life at large (Andrews & Withey, 1976).

# Bottom-up Spillover





**BOTTOM-UP SPILLOVER**

# Andrews & Withey (1976) Measure of Life Satisfaction

**How do you feel about your life as a whole?**

1      2      3      4      5      6      7

---

Delighted      Pleased      Mostly satisfied      Mixed (about equally satisfied and dissatisfied)      Mostly Dissatisfied      Unhappy      Terrible

# Andrews & Withey (1976) Other Measure of Life Satisfaction

I think my life is:

BORING	1	2	3	4	5	6	7	INTERESTING
ENJOYABLE	1	2	3	4	5	6	7	MISERABLE
USELESS	1	2	3	4	5	6	7	WORTHWHILE
FRIENDLY	1	2	3	4	5	6	7	LONELY
FULL	1	2	3	4	5	6	7	EMPTY
DISCOURAGING	1	2	3	4	5	6	7	HOPEFUL
DISAPPOINTING	1	2	3	4	5	6	7	REWARDING
BRINGS OUT THE BEST IN ME	1	2	3	4	5	6	7	DOESN'T GIVE ME MUCH CHANCE

# Andrews & Withey (1976) Measures of Satisfaction with Life Domains



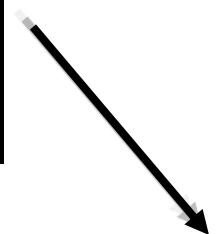
Using the delighted-terrible scale (scale is shown above), respondents answer questions such as:

- How do you feel about your car?
- How do you feel about you house/apartment?
- The services you get in this neighborhood—like garbage collection, street maintenance, fir and police protection?
- The outdoor space there is for you to use outside your home?
- This particular neighborhood as a place to live?
- This community as a place to live?
- Outdoor places you can go in your spare time?
- The weather in this part of the state?
- How safe you feel in this neighborhood?
- The way you spend your spare time, your non-working activities?
- The things you do and the time you have with your friends?
- Things you do to help people or groups in this community?
- Your marriage?
- The things you and your family do together?
- Your housework—the work you need to do around your home?
- Your religious faith?
- Your job?
- .....

# Hedonic Psychology

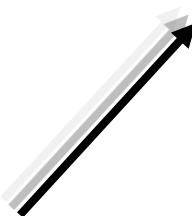
The focal point of ***hedonic psychology*** is that subjective well-being can best be conceptualized in terms of momentary feelings of positive and negative affect captured through a variety of methods such as the immediate sampling method, end-of-day diaries, the recall-of-yesterday method, and the day-reconstruction method. These methodological approaches to capturing subjective well-being were initially suggested by Daniel Kahneman and his work on “objective well-being” (Kahneman, et al., 2004).

**Experience of  
positive affect in  
situations x, x, z  
at times a, b, c**



**QOL**

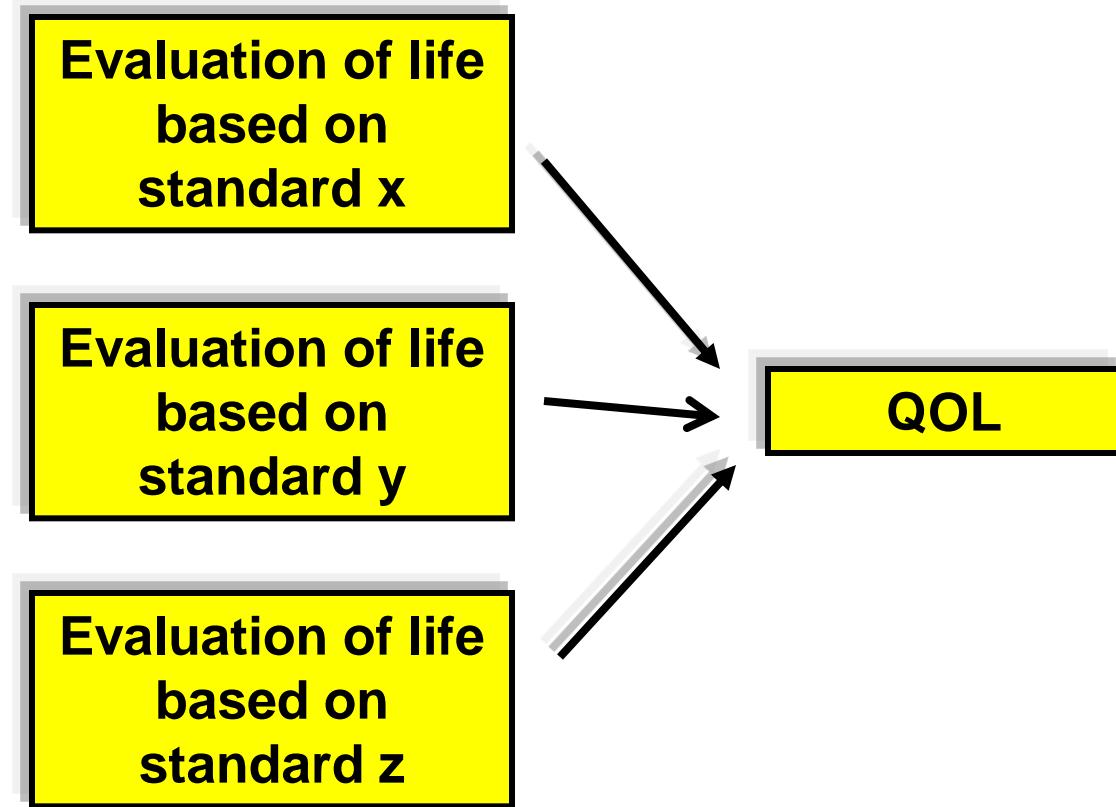
**Experience of  
negative affect in  
situations x, x, z  
at times a, b, c**



# **HEDONIC PSYCHOLOGY**

# Social Judgment Theory

One social judgment theory that has gained much popularity in QOL research is Alex Michalos' **multiple discrepancies theory** (Michalos, 1985; Lance, Mallard, & Michalos, 1995). Michalos' theory helps us understand how people make these global evaluations about their life using standards such as the ideal life, the deserved life, past life, current life, future life, etc.



**SOCIAL JUDGMENT**

# An Example (Meadow et al. 1992; Sirgy et al. 1995)

Compared to your LIFETIME GOALS, IDEALS, and WHAT YOU HAD IDEALLY HOPED TO BECOME, how satisfied are you?

Very dissatisfied 1 2 3 4 5 6 Very satisfied

Compared to what you feel you DESERVE TO HAVE HAPPENED TO YOU CONSIDERING ALL THAT YOU'VE WORKED FOR, how satisfied are you?

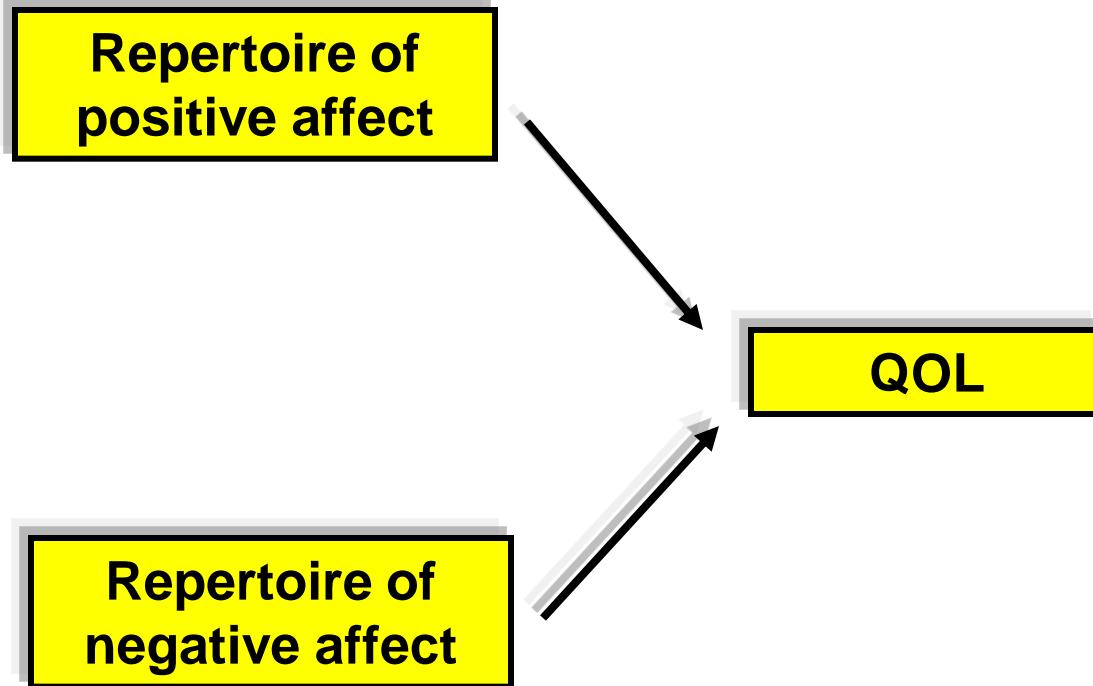
Very dissatisfied 1 2 3 4 5 6 Very satisfied

Compared to the ACCOMPLISHMENTS OF YOUR RELATIVES (parents, brother, sister, etc.), how satisfied are you?

Very dissatisfied 1 2 3 4 5 6 Very satisfied

# Positive versus Negative Affect

There is a research program in QOL studies that demonstrates that the determinants of positive affect of well-being may be different from the determinants of negative affect. Therefore, positive affect should be captured differently from negative affect (i.e., positive and negative affect are two separate dimensions and not polar opposites of the same dimension). A well-known measure based on positive/negative affect is the PANAS measure (Watson, Calrk, & Tellegen, 1988).



## **POSITIVE AND NEGATIVE AFFECT**

# An Example (PANAS; Watson, Clark, & Tellegen, 1988)

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent [INSERT APPROPRIATE TIME INSTRUCTIONS HERE]. Use the following scale to record your answers.

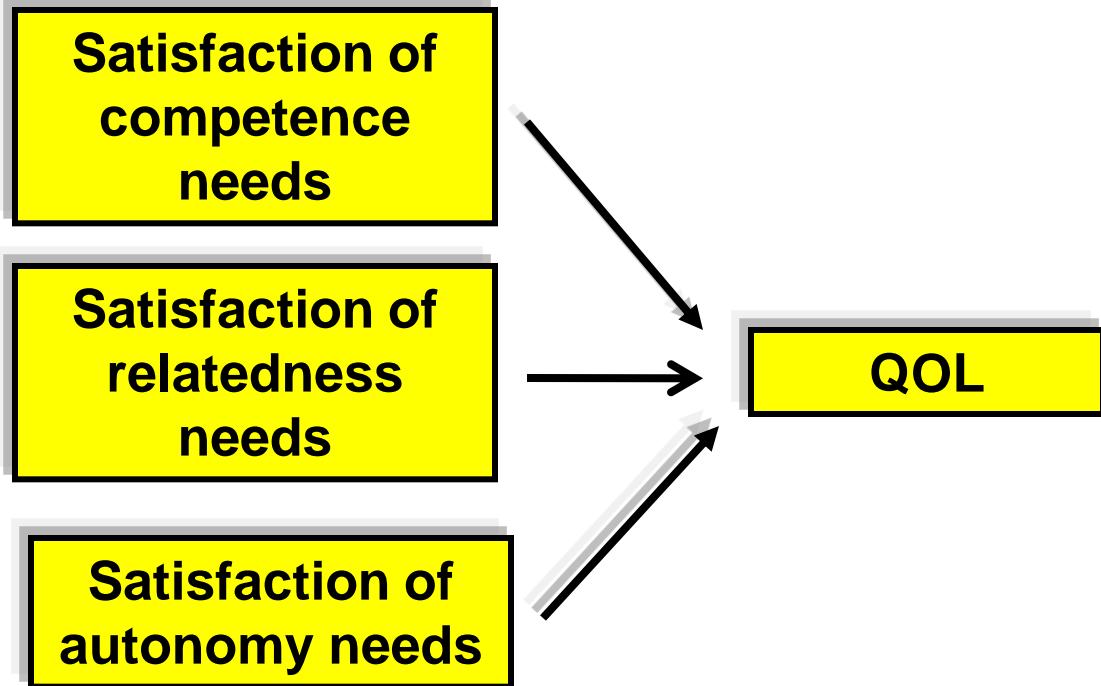
1 very slightly or not at all	2 a little	3 moderately	4 quite a bit	5 extremely
<input type="checkbox"/> interested	<input type="checkbox"/> irritable			
<input type="checkbox"/> distressed	<input type="checkbox"/> alert			
<input type="checkbox"/> excited	<input type="checkbox"/> ashamed			
<input type="checkbox"/> upset	<input type="checkbox"/> inspired			
<input type="checkbox"/> strong	<input type="checkbox"/> nervous			
<input type="checkbox"/> guilty	<input type="checkbox"/> determined			
<input type="checkbox"/> scared	<input type="checkbox"/> attentive			
<input type="checkbox"/> hostile	<input type="checkbox"/> jittery			
<input type="checkbox"/> enthusiastic	<input type="checkbox"/> active			
<input type="checkbox"/> proud	<input type="checkbox"/> afraid			

We have used PANAS with the following time instructions:

Moment	(you feel this way right now, that is, at the present moment)
Today	(you have felt this way today)
Past few days	(you have felt this way during the past few days)
Week	(you have felt this way during the past week)
Past few weeks	(you have felt this way during the past few weeks)
Year	(you have felt this way during the past year)
General	(you generally feel this way, that is, how you feel on the average)

# **Human Flourishing, Self-Determination, and Psychological Well-being**

In recent years a number of psychological theories of human flourishing have been developed. These theories are essentially based on earlier humanistic psychology theories. For example, Carol Ryff (Ryff, 1989; Ryff & Singer, 1998), and Ryan and Deci (2000) suggest that there are several universal human psychological needs, such as the need for competence, relatedness, and autonomy that contribute to human flourishing. Keyes (2002) argues that the presence of mental health is flourishing in life, and the absence of mental health is languishing in life. “Mental health” is thus a syndrome of symptoms of both positive feelings and positive functioning in life. Further, Fredrickson’s (2001) broaden-and-build theory of positive emotions suggests that cultivating positive emotions is useful for building resilience to stressful events. In essence, positive emotions enhance coping behavior.



# **SELF-DETERMINATION**

# Ryff's (1989) Construct of Psychological Well-Being

**Table 1**  
*Definitions of Theory-Guided Dimensions of Well-Being*

## Self-acceptance

**High scorer:** Possesses a positive attitude toward the self; acknowledges and accepts multiple aspects of self including good and bad qualities; feels positive about past life.

**Low scorer:** Feels dissatisfied with self; is disappointed with what has occurred in past life; is troubled about certain personal qualities; wishes to be different than what he or she is.

## Positive relations with others

**High scorer:** Has warm, satisfying, trusting relationships with others; is concerned about the welfare of others; capable of strong empathy, affection, and intimacy; understands give and take of human relationships.

**Low scorer:** Has few close, trusting relationships with others; finds it difficult to be warm, open, and concerned about others; is isolated and frustrated in interpersonal relationships; not willing to make compromises to sustain important ties with others.

## Autonomy

**High scorer:** Is self-determining and independent; able to resist social pressures to think and act in certain ways; regulates behavior from within; evaluates self by personal standards.

**Low scorer:** Is concerned about the expectations and evaluations of others; relies on judgments of others to make important decisions; conforms to social pressures to think and act in certain ways.

## Environmental mastery

**High scorer:** Has a sense of mastery and competence in managing the environment; controls complex array of external activities; makes effective use of surrounding opportunities; able to choose or create contexts suitable to personal needs and values.

**Low scorer:** Has difficulty managing everyday affairs; feels unable to change or improve surrounding context; is unaware of surrounding opportunities; lacks sense of control over external world.

## Purpose in life

**High scorer:** Has goals in life and a sense of directedness; feels there is meaning to present and past life; holds beliefs that give life purpose; has aims and objectives for living.

**Low scorer:** Lacks a sense of meaning in life; has few goals or aims, lacks sense of direction; does not see purpose of past life; has no outlook or beliefs that give life meaning.

## Personal growth

**High scorer:** Has a feeling of continued development; sees self as growing and expanding; is open to new experiences; has sense of realizing his or her potential; sees improvement in self and behavior over time; is changing in ways that reflect more self-knowledge and effectiveness.

**Low scorer:** Has a sense of personal stagnation; lacks sense of improvement or expansion over time; feels bored and uninterested with life; feels unable to develop new attitudes or behaviors.

# Flow and Engagement

The ***flow*** concept describes an optimal state of mind that individuals similarly report when they are acting with focused and intense involvement in an activity. Flow is a function of the relationship between perceived challenge of a task vis-à-vis the person's skill level. Flow is experienced when the task is both challenging and the individual feels that he or she has the necessary skill to meet the challenge.

Flow is traditionally captured using the experience sampling method or ESM (Csikszentmihalyi, Tathunde, & Whalen, 1993; Massimini & Carli, 1988). ESM involves contacting subjects several times before, during, and after the focal activity prompting the subject to record his or her level of arousal and directionality of affect.

**Engaging in  
tasks that  
challenges one's  
level of skill**



**Flow**



**QOL**

**FLOW**  
LEADER

# Purpose and Meaning in Life

Much of the writings on purpose and meaning in life (e.g., Battista & Almond, 1973; Frankl, 1963, 1967; Steger et al., 2008) support the notion that purpose and meaning are beneficial to human functioning. People who are aware of what life aspects are most vital and live their lives consistently with those values are likely to experience high levels of subjective well-being.

Examples of QOL measures based on the concept of purpose and meaning in life include Palomar (1997) that asks questions such as “How do you feel about your sense of purpose in life?”

**Engaging in life events that are purposeful and add to life's meaning**



**QOL**

# **PURPOSE AND MEANING IN LIFE**

# The Concept of Social Justice

- Many QOL indicator researchers develop indicators projects guided by the implicit notion that QOL is a community or nation in which its people enjoy a high level of **social justice**.
  
- Society is considered **just** if two distinct principles are met. The first principle of a *just society* holds when there is equality in the assignment of basic rights and duties. The second principle of the just society holds when inequalities are justified to benefit the least advantaged members of the society (Rawls, 1971, 1975) .

**Social justice:**  
equality in the  
assignment of  
basic rights  
and duties

**Social justice:**  
inequality in  
protecting the  
disadvantaged

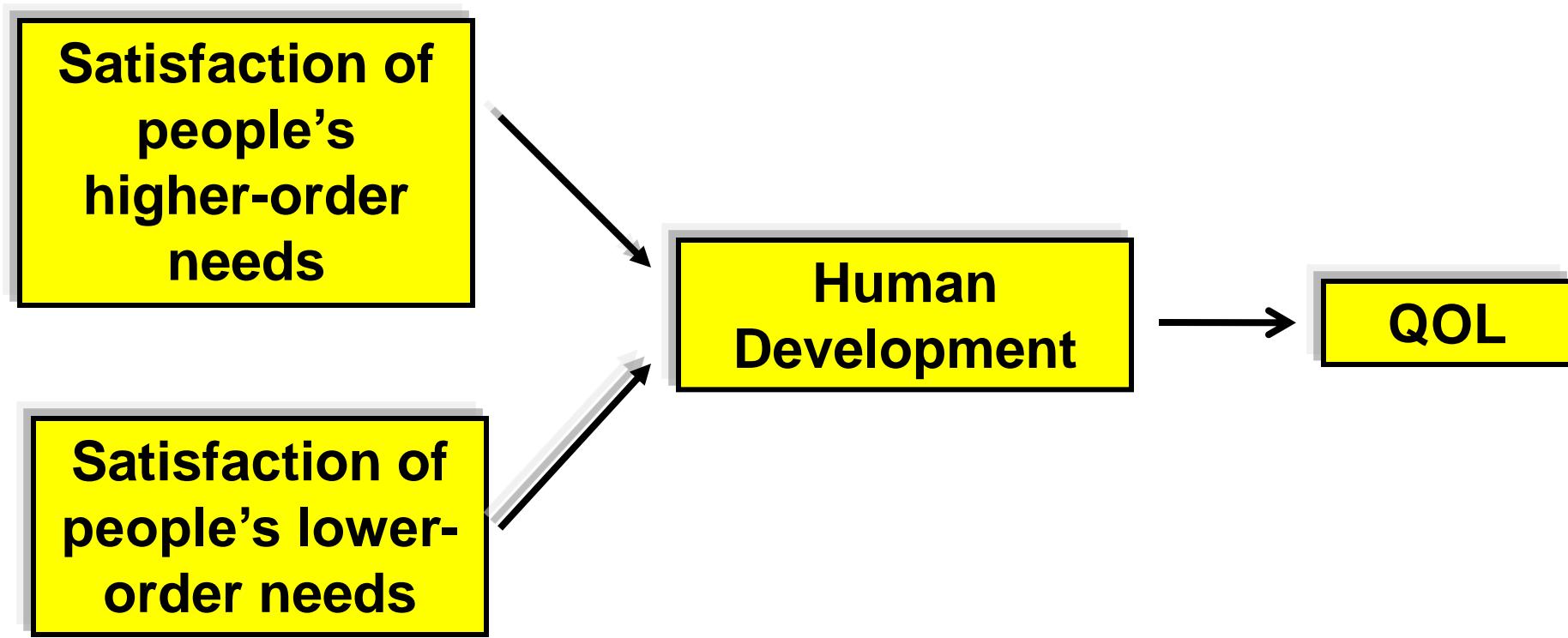
**QOL**

**SOCIAL JUSTICE**

<b>Equality in basic rights and duties</b>	<b>Inequality to benefit the least advantaged</b>
<p><input type="checkbox"/> <b><u>Right to meet basic needs</u></b> (e.g., % of population below poverty line; government entitlement programs directed to the poor and equitable appropriations across all community groups)</p> <p><input type="checkbox"/> <b><u>Right to safety</u></b> (e.g., crime rate; government programs and expenditures to combat community crime and equitable appropriations across all community groups)</p> <p><input type="checkbox"/> <b><u>Right to employment</u></b> (e.g., unemployment, educational attainment; literacy; job skills; job training programs and equitable appropriations across all community groups)</p> <p><input type="checkbox"/> <b><u>Right to a healthful environment</u></b> (e.g., air pollution, water pollution, land pollution, noise pollution; incidence of disease; government programs to combat environmental pollution and equitable appropriations across all community groups)</p> <p><input type="checkbox"/> <b><u>Duty to pay taxes</u></b> (e.g., measures of corporate welfare; tax evasion indicators; % of undeclared work; government programs to reduce tax evasion and equitable appropriations across all community groups )</p> <p><input type="checkbox"/> <b><u>Duty to vote</u></b> (e.g., % of eligible voters voting; government programs to increase voter turnout and equitable appropriations across all community groups)</p>	<p><input type="checkbox"/> <b><u>Children</u></b> (e.g., under five mortality rate, one-year olds fully immunized against tuberculosis and measles; teen pregnancy rate, low-birth weight infants, underweight children under age five)</p> <p><input type="checkbox"/> <b><u>Women</u></b> (e.g., ratio of females graduating high school to males; ratio of females unemployed to males; ratio of median wage of females to males; educational scholarships available to females relative to males; job training and assistance programs available to females relative to males)</p> <p><input type="checkbox"/> <b><u>Minorities</u></b> (e.g., ratio of minorities graduating high school to non-minorities; ratio of minorities unemployed to non-minorities; ratio of median wage of minorities to non-minorities; educational scholarships available to minorities relative to non-minorities; job training and assistance programs available to minorities relative to non-minorities)</p> <p><input type="checkbox"/> <b><u>The Poor</u></b> (e.g., educational scholarships available to the poor relative to the non-poor; job training and assistance programs available to the poor relative to the non-poor; government expenditures to the poor relative to the non-poor )</p> <p><input type="checkbox"/> <b><u>The Disabled</u></b> (e.g., ratio of disabled graduating high school to non-disabled; ratio of disabled unemployed to non-disabled; ratio of median wage of disabled to non-disabled; educational scholarship available to the disabled relative to the non-disabled; job training and assistance programs for the disabled relative to the non-disabled; government expenditures to the disabled relative to the non-disabled)</p>

# The Concept of Human Development Satisfaction

- The basic premise underlying the concept of **human development** is the notion that a community or nation is characterized as high in QOL is one that plays a significant role in satisfying people's developmental needs.
  
- Developmental needs refer to a hierarchy of lower and higher-order needs such as health, safety, and economic needs (lower-order needs), as well as social, esteem, actualization, knowledge, and aesthetics needs (higher-order needs).

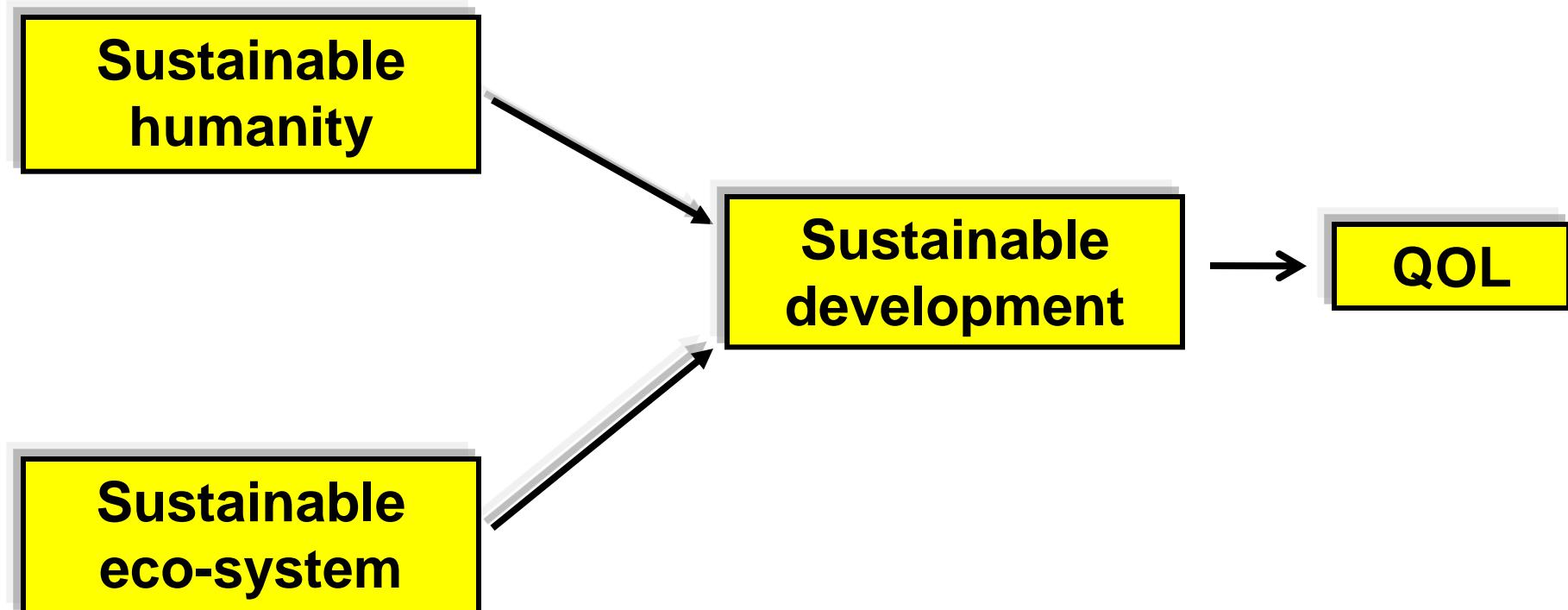


# HUMAN DEVELOPMENT

Indicators of satisfaction of lower-order needs	Indicators of satisfaction of higher-order needs
<p><input type="checkbox"/> Measures of <b><u>environmental pollution</u></b> (air, water, land, and noise) and environmental programs to reduce environmental ill being</p> <p><input type="checkbox"/> Measures of <b><u>disease incidence</u></b> and healthcare efforts to reduce health-related ill being</p> <p><input type="checkbox"/> Measures of <b><u>crime</u></b> and safety and law enforcement programs to reduce crime and enhance public safety</p> <p><input type="checkbox"/> Measures of <b><u>housing conditions</u></b> and community programs to meet housing needs</p> <p><input type="checkbox"/> Measures of <b><u>unemployment</u></b> and community programs to reduce work ill being</p> <p><input type="checkbox"/> Measures of <b><u>poverty/homelessness</u></b> and community programs to assist the poor and the homeless</p> <p><input type="checkbox"/> Measures of <b><u>cost of living</u></b> related to basic goods and services and community programs to reduce the cost of these basic necessities</p> <p><input type="checkbox"/> Measures of <b><u>community infrastructure</u></b> (e.g., utilities, roads, transportation, telecommunications) and community programs to maintain a minimum level of infrastructure</p> <p><input type="checkbox"/> Measures of <b><u>illiteracy and lack of job skills</u></b> and community efforts to eradicate illiteracy and enhance job skills</p>	<p><input type="checkbox"/> Measures of <b><u>work productivity and income</u></b> and community programs to enhance productivity and quality of work life</p> <p><input type="checkbox"/> Measures of <b><u>consumption of non-basic goods and services</u></b> and community programs to enhance consumer well being</p> <p><input type="checkbox"/> Measures of quality of <b><u>leisure and recreation activities</u></b> and community programs to enhance leisure well being</p> <p><input type="checkbox"/> Measures of <b><u>educational attainment</u></b> and community programs to enhance education well being</p> <p><input type="checkbox"/> Measures of the quality of <b><u>community landscape</u></b> and community beautification programs</p> <p><input type="checkbox"/> Measures of <b><u>population density and crowdedness</u></b> and community programs to reduce crowdedness and congestion</p> <p><input type="checkbox"/> Measure of <b><u>arts and cultural activities</u></b> and community programs to enhance cultural well being</p> <p><input type="checkbox"/> Measures of <b><u>intellectual activities</u></b> and community programs to enhance knowledge well being</p> <p><input type="checkbox"/> Measures of <b><u>religious activities</u></b> and community programs to enhance spiritual well being</p>

# The Concept of Sustainability

- ❑ Sustainable communities and nations are those that enhance the economic, social, and environmental characteristics of the place so its people can lead healthy, productive, enjoyable lives—higher QOL.
  
- ❑ Two sets of community characteristics are traditionally used to capture QOL, namely indicators of **human well-being** and indicators of **eco-system well-being**.



**SUSTAINABILITY**

Indicators of Sustainable Humanity	Indicators of Sustainable Ecosystem
<p><input type="checkbox"/> <b><u>Health and population</u></b> (i.e., physical and mental health, disease, mortality, fertility, population change)</p> <p><input type="checkbox"/> <b><u>Wealth</u></b> (i.e., income, poverty, inflation, employment, infrastructure, basic needs for food, water, and shelter)</p> <p><input type="checkbox"/> <b><u>Knowledge and culture</u></b> (i.e., education, communication)</p> <p><input type="checkbox"/> <b><u>Community</u></b> (i.e., institutions, law, crime, racial and ethnic strife)</p> <p><input type="checkbox"/> <b><u>Equity</u></b> (i.e., distribution of benefits and burdens between social groups)</p>	<p><input type="checkbox"/> <b><u>Land</u></b> (i.e., diversity and quality of forests, farmland and other land ecosystems, including their modification, conversion, and degradation)</p> <p><input type="checkbox"/> <b><u>Water</u></b> (i.e., diversity and quality of inland water and marine ecosystems, including their modification by dams and other structures, pollution and water withdrawal)</p> <p><input type="checkbox"/> <b><u>Air</u></b> (i.e., local and indoor air quality)</p> <p><input type="checkbox"/> <b><u>Resource use</u></b> (i.e., energy and materials, waste generation and disposal, recycling)</p>

# The Concept of Capabilities and Functioning

The **capabilities and functioning** approach is attributed to Amartya Sen's work (1987, 1999). This approach argues that a person's life can be viewed in terms of a combination of doings and beings—referred to as "functionings." In turn, QOL is assessed in terms of a person's freedom to choose among the various functionings. This freedom to choose is referred to as "capabilities."



## CAPABILITIES AND FUNCTIONING

Indicators of Capabilities	Indicators of Functioning
<p><input type="checkbox"/> <b><u>Health</u></b> (i.e., immunization, physician care, lack of environmental pollution, eradication of contagious disease)</p> <p><input type="checkbox"/> <b><u>Wealth</u></b> (i.e., income, poverty, inflation, employment, infrastructure, basic needs for food, water, and shelter)</p> <p><input type="checkbox"/> <b><u>Education</u></b> (i.e., level of education, literacy, job and career skills)</p>	<p><input type="checkbox"/> <b><u>Pursue a desired lifestyle</u></b> (i.e., to be able to live a lifestyle of one's choosing without coercion from others)</p> <p><input type="checkbox"/> <b><u>Succeed in the business of living</u></b> (i.e., to be able to eat, drink, have adequate shelter, protection from crime, enjoy the company of relatives and friends, have entertainment, enjoy intellectual pursuits, enjoy arts and culture)</p>

# Theoretical Concepts Guiding QOL Indicators Projects

1. Concept of socio-economic development
2. Concept of personal utility
3. Concept of the just society
4. Concept of human development
5. Concept of sustainability
6. Concept of capabilities and functioning

# Thank You

If any would like a copy of this presentation, do not hesitate to contact me ([sirgy@vt.edu](mailto:sirgy@vt.edu)), and I'll be more than happy to e-mail you the slides (and also the actual SIR article).