

Center for Creative Leadership®

LEADERSHIP GAP INDICATOR™

Technical Manual

Version 2.0

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Research Basis

This manual describes the research basis for the Leadership Gap Indicator (LGI, v1.0). It provides evidence of the reliability and validity of the assessment and presents additional support for its psychometric quality. Note: In the revised Leadership Gap Indicator (LGI v2.0), competencies are called *capabilities* and derailment factors are called *barriers to success*.

ASSESSMENT OF RELIABILITY AND VALIDITY

The validity and reliability of Leadership Gap Indicator was established as part of a study sponsored by the Center for Creative Leadership (CCL) and supported by its research partners: the Singapore Economic Development Board, the TATA Management Training Center, and Merrill Lynch. The data were collected from 2006 to 2008. Sixty-three percent of the sample was from the financial services industry, and 37 percent was from information technology industries. Thirty-seven percent resided in the United States, 20 percent in India, and 43 percent in Singapore. The participants' mean age was 42 (SD = 8.6). Seventy-one percent of the sample was male. In terms of management level, 52 percent was middle, 30 percent was upper middle, 13 percent was upper, and 5 percent was executive. On average, respondents have lived in their current countries for 35 years, and 55 percent have been leaders in their current organizations for more than five years.

FACE VALIDITY

Focus groups of subject matter experts were conducted in India (n = 10), Singapore (n = 5), and the United States (n = 5). Subject matter experts (Human Resource leaders and test developers) evaluated the competency descriptors according to their (1) relevance to leadership effectiveness in their sector and (2) importance to the organization. Competency descriptions that were identified as relevant and important were used in the survey and serve as a testimony to face validity.

CONSTRUCT VALIDITY

As is standard psychometric practice in cross-cultural research, we conducted Exploratory Factor Analysis (EFA) and Item Response Theory (IRT) analyses to ensure equivalence of our measures across our country groups. Stated differently, we wanted to make sure our items were not affected by differential item functioning (DIF, or a lack of measurement invariance) because of country differences. DIF occurs when individuals from two different groups with similar levels of a latent trait do not receive comparable observed item or scale scores because of differences in item parameters across the groups. Meaningful comparisons among groups cannot be made unless DIF is ruled out.

EXPLORATORY FACTOR ANALYSIS (EFA)

A principal-axis EFA was performed to determine whether each of the study's four 20-item measures met the unidimensionality assumption required by IRT analyses. EFA was used to separately assess the dimensionality of each of the 20-item measures per country group, resulting in twelve total EFAs. As

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recommended by Hatcher (1994), scree plots and interpretability were the criteria used for selecting the best factor structure. We also considered Reckase's (1979) criterion for assuming unidimensionality. Specifically, Reckase argued that the unidimensionality assumption is met when the first factor explains at least 20 percent of the variance in scale items and the second factor explains only a small portion of variance present.

ITEM RESPONSE THEORY (IRT)

The measurement equivalence of ratings across country can be examined via one of the multiple analytic techniques available based on IRT. IRT is a measurement technique that is used to investigate the relationships between an underlying latent construct and the probability of observed responses to items purported to measure that latent trait. Because the survey items used in this study have a Likert-type format, Samejima's (1969) Graded Response Model (GRM) was used to estimate item parameters. Among the models available to use with polytomous data, the GRM is commonly employed in psychological measurement. In the GRM, two-item parameters are estimated. The first parameter estimated is the *a* parameter, or item discrimination, and represents the strength of the relationship between an item and a latent trait. There is only one *a* parameter per item, and it is analogous to item factor loadings in Confirmatory Factor Analysis (CFA). The second parameter estimated is the *b*, or threshold, parameter. There are one fewer *b* parameters than there are response options for Likert measures (e.g., 6 *b* parameters for a 7-point scale), and these parameters indicate the level of the latent trait that is needed to have an equal probability of choosing a certain response option (e.g., 3) or those higher (e.g., 4–5). The *b* parameters are most similar to item intercepts in CFA.

DIFFERENTIAL ITEM FUNCTIONING (DIF) ANALYSES

The IRT analytic technique that we used to assess DIF in this study was the Differential Functioning of Items and Tests (DFIT) framework. We conducted this analysis following the procedure outlined by Raju, van der Linden, and Fleer (1995). DFIT analyses were conducted separately on each 20-item measure for each possible pairwise country comparison (i.e., India vs. Singapore, India vs. U.S., and Singapore vs. U.S). Specifically, item and person parameters were initially estimated for both the reference and focal groups via the GRM described previously using MULTILOG 7.03 (Thissen, 1991). Item parameters in the reference group were transformed to the metric of the focal group's item parameters using the Equate 2.1 (Baker, 1995) program. In this study, the reference group was always the country with larger sample size, and the focal group was the country in the comparison with the smaller sample size. This method accomplishes the linking or equating procedure using a modified version of Stocking and Lord's (1983) test characteristic curve method.

After equating the item parameters, DFIT statistics were obtained using the DFITPS6 program (Raju, 1999). The most relevant DFIT statistic in this study was the Non- Compensatory Differential Item Functioning (NCDIF) index. The DFITPS6 program provides an NCDIF value for each item, and these indices are generally used to determine whether a given item has DIF. In this study, items were deemed to have DIF if their NCDIF values exceeded the NCDIF cutoff value recommended by Raju (1999). Raju recommended a cutoff of .216 for items rated on a 7-point response scale and .384 for items rated on a 9-point response scale. DFIT also provides an index regarding whether there is

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differential functioning at the test or scale level, called differential test functioning (DTF, the scale-level equivalent of DIF).

ASSESSMENT OF UNIDIMENSIONALITY

Results from the EFAs of each of the four measures in each of the three country samples are presented in Table 1. As shown in the table, the first factor in each of these analyses had a large eigenvalue, whereas the second factors had eigenvalues of approximately 1 or less. The first factor in each analysis generally accounted for more than 50 percent of the variance, while the second factors accounted for less than 7 percent of the variance. The EFA results of all analyses met the unidimensionality criterion proposed by Reckase (1979) in that the first factors in these analyses accounted for much more than 20 percent of the items' variance and the second factors accounted for small percentages of variance. Additionally, in cases in which a second factor in the EFAs had an eigenvalue greater than 1, we examined a two-factor structure. In all cases, these two-factor solutions lacked simple structure and interpretability in that many items loaded highly onto both factors. In light of this, we concluded that each of our measures was best characterized as being unidimensional. The four factors can be best labeled Current Skill, Needed Skill, Important Now, and Important in the Future. These findings support the assumption of unidimensionality. The scree plots also provided strong support for unidimensionality.

Table 1

Principal Components and Confirmatory Factor Analysis Results for U.S., Singapore, and India

Scale	U.S.				Singapore				India			
	E1	E2	PV1	PV2	E1	E2	PV1	PV2	E1	E2	PV1	PV2
Current Skill	10.86	1.06	54%	5%	12.17	.93	61%	5%	10.58	.09	53%	5%
Needed Skill	14.39	.68	72%	3%	14.89	.56	75%	3%	13.30	.77	66%	4%
Important Now	8.61	1.49	43%	7%	9.91	1.18	50%	6%	10.33	1.01	52%	5%
Important in the Future	8.65	1.35	43%	7%	9.49	1.35	47%	7%	8.52	1.15	43%	6%

E1 = Eigenvalue for the first component E2 = Eigenvalue for the second component
PV1 = Percent of total variance accounted for by the first component PV2 = Percent of total variance accounted for by the second component

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ITEM PARAMETERS FROM IRT ANALYSES

The GRM was used to estimate item parameters for each of our four measures per country. Item *a* parameter estimates ranged from 1.179 to 2.868, indicating that most items had reasonably strong relationships with their latent constructs. Overall, item *b* parameter estimates were adequately spread across the possible values of the latent trait.

DFIT FINDINGS

DFIT comparisons were made across all four measures (current skill, needed skill, important now, and important in the future), and none of the items exceeded their respective NCDIF cutoff values as recommended by Raju (1999). Many NCDIF values were close to 0, indicating nearly perfect measurement invariance across country groups. Thus, no DIF was found for any of the items across any of the country groups, meaning that the measures appeared to function equivalently across all cultural groups in our sample. This permits us to make meaningful mean group comparisons on each item, as mean group differences can be attributed to differences in the respective underlying latent traits and not spurious differences created by the instrument. Two competencies (being a quick learner and self-awareness), however, on the Important in the Future scale were not equivalent in the comparisons involving Singapore. Comparisons to Singapore for these two competencies, therefore, is not recommended.

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RELIABILITY

Reliability of the survey was calculated using Cronbach's (1951) alpha. The results are provided in Table 2. These analyses reveal all scales were above the generally accepted minimum of .70.

Table 2

Reliability Indexes on Scales for USA, Singapore, and India

Scale	Number of Items	USA Cronbach's alpha	Singapore Cronbach's alpha	India Cronbach's alpha
Current Skill	20	.96	.97	.95
Needed Skill	20	.98	.98	.97
Important Now	20	.95	.93	.95
Important in the Future	20	.94	.93	.93

Establishing validity and reliability is an ongoing process. For further and continuing evidence, please look for updates to this guide.

DEVELOPMENT OF COMPETENCIES

Approximately 20 subject matter experts (SMEs) from CCL reviewed all 56 competencies and five derailment factors and then grouped them into meaningful categories according to key managerial areas. The following process was used to group the competencies:

Scale Sort I

Each individual received 56 cards with a scale name written on each card. Individuals were asked to cluster related competencies and then give each cluster a category name. The results from this clustering were documented and reviewed by SMEs. Categories were then proposed based on the frequency with which the competencies were grouped.

Scale Sort II

Using a different group of SMEs, the proposed scale categories were reviewed, modified, and revised to reflect the "best" scale category names. SMEs were also asked to move any competencies around from one category to another if something didn't seem to fit. A final group was formed to address any

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outstanding issues on category names or scale placement within a category. The results were reviewed, and a final decision was made on category names and competencies grouped in each category.

NORMS

How do we compare to other organizations? This common question can be addressed by looking at norms or average results for groups. To date, the Leadership Gap Indicator has been used by 2,200 leaders from 15 organizations in three countries. Table 3 presents a description of the norm group for the Leadership Gap Indicator. Note that the norms provided are based on the "Understanding the Leadership Gap" research study undertaken by CCL during 2005–2008.

Because the final element of the CCL research was to determine how aligned current leadership is with what is thought to be important for effectiveness in the future, the following norm information focuses on results specific to that research question.

Table 3

Leadership Gap Indicator Norm Group April 2006—April 2008

	N	%
Total Sample	2200	100.0
Top (responsible for entire business, e.g., CXO, CFO, COO, CTO)	114	5.2
Executive (oversee multiple departments/units, or highest level in a function)	274	12.5
Upper middle (heads of functions or departments)	638	29.0
Middle (have groups reporting to me, but I report to function heads)	1089	49.5
Missing	85	3.9
Finance	1392	63.3
Information Technology	808	36.7
Singapore	953	43.3

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United States	805	36.6
India	442	20.1
Male	1525	69.3
Female	635	28.9
Missing	40	1.8
Mean Age	42	51.7

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Sample Size

Table 4 indicates how many respondents are needed for survey results to be reliable.[1] It provides an estimate of how many respondents should be selected when administering the LGI. These sample sizes assume random selection of participants.

Table 4

Sample Size Selection

Population	Sample	Population	Sample	Population	Sample
10	9	230	144	1,400	301
15	14	240	147	1,500	305
20	19	250	151	1,600	309
25	23	260	155	1,700	313
30	27	270	158	1,800	316
35	32	280	162	1,900	319
40	36	290	165	2,000	322
45	40	300	168	2,200	327
50	44	320	174	2,400	331
55	48	340	180	2,600	334
60	52	360	186	2,800	337
65	55	380	191	3,000	340
70	59	400	196	3,500	346
75	62	420	200	4,000	350
80	66	440	205	4,500	354
85	69	460	209	5,000	356

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90	73	480	213	6,000	361
95	76	500	217	7,000	364
100	79	550	226	8,000	366
110	85	600	234	9,000	368
120	91	650	241	10,000	369
130	97	700	248	15,000	374
140	102	750	254	20,000	376
150	108	800	259	30,000	379
160	113	850	264	40,000	380
170	118	900	269	50,000	381
180	122	950	273	60,000	381
190	127	1,000	277	70,000	382
200	131	1,100	284	120,000	382
210	136	1,200	291	160,000	383
220	140	1,300	296	1,000,000	383

[1] The sample sizes in the table reflect a degree of accuracy = plus or minus .05, proportion of sample size = 0.5, and confidence level = 95% (Zemke & Kramlinger, 1982).

DERAILMENT RESEARCH

For two decades, CCL researchers have studied derailment in a leader's career (e.g., Leslie & Van Velsor, 1996; Lombardo & McCauley, 1988; Morrison, White, & Van Velsor, 1987; Van Velsor& Leslie, 1995). A derailed manager is one who, having reached the general manager level, is fired, demoted, or considered to be in a career plateau.

Derailment doesn't refer to individuals who elect to stay at a particular level or are not able to reach the top of the corporate pyramid for legitimate reasons. It is important to note that organizations saw these derailed leaders as having high potential for advancement but not living up to their potential. Many of these leaders had impressive track records right up to the point that their careers derailed.

The following five key characteristics are seen in derailed executives:

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1. have problems with interpersonal relationships
2. fail to hire, build, and lead a team
3. fail to meet business objectives
4. are unable or unwilling to change or adapt
5. lack a broad functional orientation

The process for derailment represents an intertwined relationship between individual and organizational dynamics (see Table 5). High-potential and fast-tracked leaders can easily become derailed if the organization fails to take an active hand in addressing the derailment potential. Derailment in any organization can be costly. Direct costs in the form of turnover, loss of profitability, and the exit of strategic company knowledge can sometimes be as high as an executive's salary. Indirect costs such as low morale and poor customer satisfaction can also take their toll on organizational commitment and productivity. According to Lombardo & Eichinger (1995), 30 percent to 50 percent of high-potential leaders and executives derail at some time during their careers.

Table 5

The Dynamics of Derailment

Strengths become weaknesses	The strengths that made the person successful can become liabilities in situations where other strengths are more important.
Blind spots matter	Weaknesses and flaws that did not matter previously or that were forgiven in light of strengths or results become more obvious in a new situation.
Bad luck	Sometimes derailment follows circumstances that are beyond the leader's control and is not an accurate reflection of the person's talent. Sometimes, however, bad luck is exacerbated by one of the other derailment dynamics.

(Excerpted from McCall, 1998)

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DERAILMENT IN NORTH AMERICA AND ASIA

Perceptions of derailment were examined using data from a total of 2,670 leaders from five countries: Singapore (n = 953), India (n = 442), Japan (n = 249), U.S. (n = 805), and Hong Kong (n = 221). The leaders worked in 15 different companies in the information technology (n = 808) and financial services sectors (n = 1862). The respondents represent four different levels of management: middle (52.4 percent), upper middle (27.4 percent), executive (12.0 percent), and top (4.6 percent). On average, they have lived in their current countries for 33 years, have worked in their current positions for about six years, and are 41 years old. The majority of the sample is male (68 percent).

Unlike previous studies that assessed derailment, this study asked leaders to rate the extent to which each derailment factor is a problem for leaders at their level in their organization. They rated each factor using a nine-point scale ranging from an extremely small amount to an extremely large amount.

Overall, leaders do not see critical challenges to their careers or development. In other words, derailment was not found to be a cause for concern. A comparison of the percentage of total leaders who rated derailment in their organization high—that is, 7 to 9 on a nine-point response scale—showed that *too narrow managerial experience* and *difficulty building and leading a team* (see Table 6) could be factors for derailment. While these percentages appear low overall, they represent a total of 1,478 leaders, or 55 percent of the total sample.

Table 6

Percentage of leaders who rated derailment a problem in their organization

		Too narrow managerial experience	Difficulty building and leading a team	Difficulty changing or adapting	Problems with relationships	Failing to meet business objectives
Whole Sample		19%	16%	14%	12%	9%
Leaders	Middle	16%	15%	12%	12%	7%
	Upper middle	22%	17%	17%	14%	10%
	Executive	22%	18%	16%	12%	10%
	Top	22%	19%	12%	10%	10%
Industry	IT	21%	14%	17%	13%	11%
	Finance	18%	17%	12%	12%	8%
Country	U.S.	19%	14%	13%	10%	8%
	Hong Kong	20%	16%	12%	15%	8%

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	Singapore	18%	15%	13%	12%	7%
	India	19%	20%	17%	12%	9%
	Japan	18%	17%	17%	16%	13%

LEVEL DIFFERENCES

Leaders' perceptions of their derailment potential differ. Middle leaders overall tend to rate their potential to derail lower than the other management levels. These data also show, surprisingly, that top leaders believe they have greater potential to derail because of problems with *too narrow managerial experience*.

INDUSTRY DIFFERENCES

Leaders in the financial services sector perceive themselves to be less likely to derail overall than leaders in the IT sector. These results also showed that leaders in both the IT and financial services industries perceive the potential to derail in the area of *too narrow managerial experience.*

COUNTRY DIFFERENCES

This study shows that leaders in the U.S. perceive that they are less likely to derail than leaders in Asian countries. Overall, Japanese leaders perceive the greatest potential for derailment. Leaders in Hong Kong reported higher ratings (20 percent) than the other countries on *too narrow managerial experience,* while leaders in India (20 percent) rated *difficulty building and leading a team* a potential problem in their organizations as compared to leaders in other countries.

PREVENTING DERAILMENT

If derailment is a problem in your organization, consider the following actions:

- Prefer zigzagging career paths for leaders over vertical ones.
- Give lots of "how you did it" feedback instead of "what you did."
- Seek support and coaching for leaders during transitions.
- Make leaders aware that new jobs require new frameworks and behaviors.
- Encourage leaders to seek feedback throughout their careers.
- Do not regard one failure as coming "off the track."
- Allow leaders to complete jobs and assignments before moving on to new ones.

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- Help leaders seek developmental opportunities that can help overcome flaws.

No single success characteristic or fatal flaw is enough to control the outcome of a leader's career. Leaders who have potentially derailing flaws but the ability to learn and develop can use leadership training, feedback, and developmental assignments to overcome possible career failure and prepare themselves for more senior leadership roles.

Derailment does not mean the end of a leader's career. Derailed leaders could leave their organizations and go to other companies where their skills are a better fit or start their own businesses with success. Although recovery is believed to be possible, there is little evidence to support this.

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Additional Research

Hannum, K., & Leslie, J. B. (2007, May). "Understanding the leadership gap: The strong link between leadership and corporate performance makes a deficit in leadership a concern." *Human Resources Magazine*, pp 13.

A critical challenge for organizations today is the identification, selection, and development of leadership talent. Leaders are working in the face of unprecedented complexity. The emergence of a global market, political and social reforms, economic opportunities, technological innovations, and changing workforce demographics define just some of the complexities and challenges leaders must navigate. Leaders who can effectively navigate this dynamic landscape are in demand, but are they available and how can they be identified? The strong link between leadership and corporate performance makes a deficit in leadership a concern of talent identification and management. The general concept of a leadership gap is easy to grasp; it implies that the current capacity is not aligned with needed or desired capacity.

A leadership gap by itself may not seem that important in the context of other organizational challenges and priorities. However, there is a link between leadership and corporate performance. It is this link that makes a gap, specifically a deficit, in leadership a concern.

Knowing that there is a leadership gap is a call to action, and it is clear that something needs to be done, but what? First, it is important to understand that a leadership gap can manifest itself in many different ways. One type of gap is that leaders are focused on the "right" capacities but are not skilled at the level they need to be. This type of gap can be addressed by engaging leaders in ways that develop the targeted areas. Another type of gap, perhaps more concerning, is that leaders are not focused in the right areas for today or in the future. In either case, determining the right areas on which to focus is no small undertaking. Leadership is increasingly touted as a means of competitive advantage—not just any kind of leadership, but leadership that fits with an organizational culture and meets an organization's strategic needs.

Building leadership strength requires knowing what aspects of leadership are of the most value and relevance to an organization. Unless there is a cohesive sense of what needs to be developed, how, and why, the fit between leadership development initiatives and what needs to happen on the job may not be clear. Despite investing in leadership development, many organizations are unable to close the leadership gap. The obvious places to examine the reasons behind the failure to close the gap are the processes used to identify the gaps, the prioritization of which gaps are critical, and the tactics used to close the gap.

Hannum, K., & Leslie, J. B. (2007, June). Identifying the leadership gap: What are some of the gaps in Asian leadership? *Human Resources Magazine,* pp 13.

With seven of the top ten growth regions in the world economy being in the Asia Pacific region, it is important to uncover and comprehend the immense scope of data that will help further the understanding of leadership issues and challenges there, as the challenges that are faced in the West

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and other parts of the world may be unique to those areas.

The preliminary trends shared below are based on approximately 700 individuals in two organizations with locations in Japan, India, Hong Kong, and Singapore. A modified version of the original Benchmarks® survey is used to gather data. The modified survey is shorter and also gathers data in about four additional areas: culturally adaptable, strategic planning, employee development, and inspiring commitment.

Early indications from the Asia sample indicate "confronting people" (acting resolutely when dealing with problems) is more of a skill of leaders in Asia than in the first study, which primarily included North Americans. Not having leaders skilled in confronting people can create problems in the organization because performance or behavioral issues are allowed to persist and can have an impact on the other employees and the quality of work. The level of importance for both groups was fairly low.

"Respecting individuals' differences" appears to be more important and of higher skill in the Asian sample. It is a fair assumption that as more and more organizations have global operations, such a skill will be important. This finding suggests that leaders in Asia are more prepared to face this coming challenge.

The first study found "leading employees" (directing and motivating people) important for success but not a skill. In the current study, early data suggest a similar finding in Asia. This finding is of concern, given that many current research reports indicate leadership—or some variation of it—as the crucial skill for being successful in the current market.

Leslie, J. B., & Chandrasekar, A. (2009). Managerial strengths and organizational needs: A crucial leadership gap. In R. B. Kaiser (Ed.), ***The perils of accentuating the positive*** **(pp. 27–38). Tulsa, OK: Hogan Press.**

This chapter explores gaps between current and desired levels of leadership to address basic questions about the current state of leadership and the viability of strengths-based development. How widespread is the gap between the strengths leaders possess and the strengths needed for their organizations to succeed? Is this strictly a U.S.-based problem—or is it also a problem in other countries? Which do our data suggest leaders focus on to enhance corporate performance—strengths or weaknesses?

Data reported in this article were collected between January 2006 and December 2007. The sample is largely male (69 percent), and the average age is 42. Data were collected using a modified version of Benchmarks® (Lombardo, McCauley, McDonald- Mann, & Leslie, 1999), a 360-degree tool that assesses the characteristics of successful executives.

Comparing the rank order of the importance of competencies to the amount of skill leaders report possessing reveals a major disconnect. Only five of the competencies rated as above average in importance (*Resourceful, Participative management, Being a quick learner*, *Doing whatever it takes*, and *Respecting individuals' differences*) were also rated as above average in current skill level. In other

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words, the majority of the competencies rated important for organizational success are not the leadership skills at which their leaders perform the best. The biggest leadership gaps are in the areas of *Strategic planning*, *Managing change*, *Employee development,* and *Inspiring commitment in employees*. More striking, *Leading people*—the competency rated most important for organizational success—was ranked a poor 13th out of the 20 skills. These data also show that many leaders' strengths are not in areas that are considered most important for success. *Putting people at ease*, for example, was rated important for success by only 52 percent of the leaders surveyed, yet skill in this area was ranked as above average among these 20 skills (ninth).

To determine whether these trends in the leadership gap are common across cultures or confined to the U.S., we analyzed comparable survey data collected from 953 leaders working in Singapore and 442 leaders working in India. Compared to the U.S. data, strikingly similar gaps in the *importance* and *skill* were found in both countries. Comparing the *importance* that leaders in Singapore and India placed on the 20 leadership competencies, we found a considerable overlap with the competencies that U.S. leaders rate as important. Specifically, eight out of the top ten leadership competencies listed for the U.S. are the same across the three countries.

The next question we considered was the amount of *skill* leaders in Singapore and India report compared to leaders in the U.S. We found that seven of the top ten strengths in the U.S. sample were also in the top ten strengths in the samples from Singapore and India. With ratings of importance and strengths fairly similar across the three countries, it is evident that a clear and perhaps universal gap exists in terms of leadership capacity.

There are two major implications from this survey study. First, an exclusive focus on strengths in leadership development is insufficient. Second, closing the leadership gap requires that we do a better job of aligning the focus of development with organizational needs.

Leslie, J. B., & Taylor, S. (2005). The negatives of focusing only on the positive. *Leadership in Action, 24*(6), 17–18.

This study is based on information from the Benchmarks® database collected between June 2000 and November 2004 from some 438,000 individuals: about 40,000 leaders; 362,000 of their peers, direct reports, and other coworkers; and 36,000 of their direct bosses. More than 7,500 organizations, many of them Fortune 500 companies, are represented in the database. Using these data, CCL researchers have investigated several important underlying questions, including which leadership skills and perspectives leaders' bosses consider to be critical for organizational success, and how strong coworkers consider leaders to be in these critical skills and perspectives.

The bosses chose the following eight competencies most often: Ability to lead employees (chosen by 89 percent of the bosses), Resourcefulness (81 percent), Decisiveness (75 percent), Managing change (69 percent), Straightforwardness and composure (68 percent), Building and mending relationships (67 percent), Doing whatever it takes (67 percent), and Employing a participative management style (64 percent).

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To determine workers' perceptions of leaders' actual strengths, CCL researchers analyzed the ratings leaders received from their peers, direct reports, and bosses on all sixteen Benchmarks® dimensions—nearly 400,000 ratings.

The findings were startling. The bosses' ranking of capabilities most critical for organizational success was markedly different from the coworkers' ratings of leaders' strengths. In fact, the competencies that bosses identified as most important for their organizations' success and presumably for the success of the leaders in those organizations were in many cases not rated by coworkers as managerial strengths.

Thirteen of the sixteen skills were rated below the statistical average for the database. That is, on the whole, the assessed leaders were not considered strong in these thirteen areas. Moreover, none of the eight skills that bosses rated as above average in importance received above average ratings as a managerial strength.

It's fine to play to one's strengths until something in the leadership structure, the organization, or the environment changes. Then new skills may be required. The bottom line is that people can learn, grow, and change. However, not everyone can be the best at all tasks. Strengths and talents can be developed, nurtured, and honed. But the approach of focusing only on developing strengths not only limits human potential but may also limit an organization's best performance to areas that are not the most important for the organization's future success.

Leslie, J. B., & Wei, R. (2009). Assessing leadership and the leadership gap. In M. Rothstein & R. Burke (Eds.), ***Self-management and leadership development.*** **San Francisco: Edward Elgar.**

This chapter serves as a tool for anyone who is eager to learn about leadership and wants to take responsibility for developing their skills through experience. The chapter begins with research describing a survey of 2,200 leaders from the U.S., India, and Singapore. The results show critical importance both now and in the future for all leaders to be effective in *leading people, strategic planning*, *managing change, employee development*, *inspiring commitment*, *balancing personal life and work*, and *decisiveness*.

The second part of the chapter focuses on tools, techniques, and strategies that individuals can use in order to increase the likelihood that they can learn to develop through their experiences. More specifically, this section of the chapter provides strategies and tools to help close leadership gaps, gives advice about whom to seek help from during this developmental phase, and allows each person to begin to craft his or her own development plan. This material is organized around two questions: What do you need to learn, and how can you close the leadership gap? The first part invites the reader to do a self-assessment of their own leadership gap and choose a developmental goal. The second outlines three principles of development and five strategies and tools to close the leadership gap:

Principles of development

1. Development is a process.

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2. Experience drives development.

3. You are responsible.

Strategies and tools to close leadership gaps

1. Seek challenging assignments.

2. Establish developmental relationships.

3. Enhance your ability to learn from experience.

4. Reflect on your experience.

5. Solicit ongoing feedback.

Leslie, J., Chandrasekar, A., & Wei, R. (2008). *Understanding the leadership gap.* Research report. Greensboro, NC: Center for Creative Leadership.

This report is organized around the answers to four questions which address perceptions of leadership effectiveness.

- What leadership skills and perspectives are critical for success?
- How strong is the leadership in these critical skills and perspectives?
- How aligned is leadership strength with what is considered important?
- What factors lead to potential barriers to success for leaders?

Results are presented overall, by country, by industry, and by organizational level. Data for this comes from 2,200 leaders from India, Singapore, and the U.S. The leaders were employed in the IT and finance sectors. The results are presented in eight key findings:

1. Leaders from the East and West *strongly agree* on which skills are essential for effective leadership in today's ever-changing business environment.

2. Leaders consider people skills (leading employees, strategic planning, inspiring commitment) and leading the organization skills (managing change, resourcefulness, and being a quick learner), followed by doing whatever it takes, most important now and in the future.

3. Leaders think about effective leadership similarly regardless of their country, industry, or organizational level.

4. Leaders lack the skills they need to be effective. This research surfaced a surprising

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challenge—the presence of a skills gap. Leaders in both the East and West report an overwhelming lack of preparedness.

5. Leaders in India and the IT sector consider themselves to be least prepared.

A universal leadership gap exists. Leaders from the East and West report shortfalls between the required leadership capacity and the forecasted leadership capacity.

Though they are considered critical for effective leadership, translating vision into realistic business strategies, managing change, and encouraging employees to develop in their career are perceived to be the weakest skills—biggest leadership gaps—across the leadership bench.

Good news: Leaders do not see critical challenges to their careers or development. Derailment is not a cause for concern.

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