Review

The idolization of Chien-Ming Wang and social psychological factors in Taiwan

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This study aims to explore the relationship between the idolization of Chien-Ming Wang and the social psychological factors in Taiwan. Documentary analysis was applied to analyze the time and political background of baseball development in Taiwan. Also in-depth interviews with sports journalists in Taiwan, the CEO of the World Games 2009 in Kaohsiung, and Wang's fans were conducted. It was found that Wang's image of a baseball superstar in Taiwan is related to the colonization of Taiwan by the Japanese. Because baseball was brought to Taiwan by the Japanese, as one of the colonized people, the outstanding baseball player Chien-Ming Wang's appearance in the major league, the highest level of baseball, represented a way the Taiwanese people released their pressure from the complex about being colonized. Besides, in the aspect of political background, after the war, baseball was not recognized by KMT, the ruling party. However, under the pressure from the international environment, the government started to use baseball as a tool to consolidate its regime. In addition, with the complex political background and economic recession in Taiwan, people's lives were difficult. Wang's outstanding performance in baseball fields thus made the Taiwanese people to place hopes on him. Therefore, mass media had paid quite a lot of attention to Wang, further making him a superstar in Taiwan.

Key words: Chien-Ming Wang, baseball, sports star, endorsement marketing, news coverage, political turmoil.

INTRODUCTION

In competitive sports and, consequently baseball, the level of performance is determined by a set/number of a

complex set of variables intercorrelated: Technique (coordination abilities, kinetic skillfulness), Tactics (cognitive and planning abilities), Psychological factors (motivation, desires, willingness) and Fitness. Chien-Ming Wang is an important link in the Taiwanese society and a significant symbol of nationalism in Taiwan. Hayes (1928)

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talked about the importance of groups in human society, "the national consciousness is inherent like a birthmark. It has been existing since the dawn of human history. A group of people develop certain connections because of similar language, history, and culture. This is how they distinguish themselves with others" (translated by Dung, 2004). Klapper (1969) proposed a similar ideal that formation of group behaviors and participation of the general public are results of searching for identification with a group in hopes of reconstructing their selves. Andrews and Jacksons (2001) indicated that, in the global cultural economic system, the roles sports stars play include labors in sports fields, marketable sports products, role models, and political images. In addition, Liao and Lo (2005) believed that sports heroes' values lie in playing the roles of leaders and anti-society characters, showing social cultural values, being targets of imitation, and developing cohesion in society.

Lin (1995: 11-12) believed that the most important meaning of sports is to create representation of identification with a nation, including signification and symbolic systems. Through symbolic systems, meanings are produced. Representation generates meanings. Through representation, we can our life experiences and find out "who we are."

The fact that Chien-Ming Wang has become a sports star of Taiwan is highly related to the sport he does, baseball. The cultural and historical meanings baseball has carried are the key social psychological factors of the idolization of Chien-Ming Wang.

THE NATIONAL SPORT OF TAIWAN - BASEBALL

At the beginning of the present century, sport was described as 'the most important thing in the world' (Beck, 2000: 62), because of the neo-liberal free-market economic policies had a great change in the world. In 1939, the report of mass observation pointed out that the sport as a key social institution and sport-related economic activity represented "the biggest English industry" (Kuper, 2003: 147-148). In the closing decade of the century, the founder of NIKE commented that sport was at the heart of contemporary culture and increasingly defined 'the culture of the world' (Katz 1994: 199).

In mid-eighteenth century, baseball evolved from older bat-and-ball games and was played in England. Further, this sport was brought by British and Irish immigrants to America and became the national sport of the United States in the late nineteenth century (Smart, 2007). Baseball also ever is a contest of Olympic Games. Baseball is a representative sport in Taiwan and its popularity also equal to basketball and soccer. Like as a passage was written in Cina times (Yang, 2007) "Baseball is a sport we are familiar with. The US has a great influence on Taiwan, plus Taiwan was once a colony of Japan, thus from old people who had been through the Japanese colonial period to young kids nowadays, everyone knows how to play baseball. What "strikeout" and "walk" mean" is well understood.

THE HISTORY OF COLONIZATION AND BASEBALL

Japanese people once ruled Taiwan as superiors. Colonizers always rationalize unfair relationships between colonizers and the colonized by saying that the colonized are weak and uncivilized. There are two ways the colonized can change their situations. One is to revolt, and the other is to turn themselves into the like of their noble colonizers. In order to be reborn, the colonized over and over again depreciate themselves while accepting "grace" from their colonizers. Once the grace gets into their minds, they would be willing to destroy themselves. For example, Michael Jackson, a superstar in the US, tried to turn himself into a white man. Tiger Woods, a famous golf player, married a white woman. The reasons behind their actions are the same (Wei, 2004: 33-40).

In the early days, baseball in Taiwan was controlled by Japan. Baseball was an educational tool used by NDRs to tame Taiwanese people. However, the Chiayi Agricultur Vocational School baseball team with both Japanese and Taiwanese players had kept on winning in Japan and eventually won the second place of the National High School Baseball Championship in Japan. Taiwanese people's great mass fervor for baseball therefore began. As the colonized, Taiwanese people could be as good as their superior colonizers, Japanese people, in baseball fields. This fact enhanced their self confidence and had become a nod to the decolonization.

BASEBALL AND NATIONAL IDENTITY

After Japan lost the war, the National Government took over Taiwan. Baseball was then marginalized because basketball and soccer were rather hot in mainland China. In 1968, the Maple Leaf Baseball Team from Taitung had defeated the JR West All-Star Team, a world champion team, twice. Back then, Taiwan was about to leave the UN. The country was in turmoil. The Golden Dragon Little-League Baseball Team and the Giants Youth Baseball Team both had done well in international competitions. The rulers utilize the empathy effect of baseball culture and made baseball the most noticeable sport in Taiwan. Although baseball had been ignored once by the ruling class, the baseball fever and the success in three baseball championships had been highly related to the ruling class and the atmosphere in the society. Because of the folk temperament, baseball got to go beyond the ruler's prohibition policies and became stronger and stronger. Therefore, it is fair to say that the rise and decline of the development of baseball are an epitome of the wrestling between the regime and the people.

It is observed that, as a part of the assimilation policy,

baseball in Taiwan had been rooted since the Japanese colonial period. On the one hand, baseball had been in the spotlight in Taiwan; on the other hand, it had had competitiveness in international competitions. With advantages in both emotions and techniques, it was when the nation was questioned or when the people were suspicious and fearful for the future, baseball could stand out to fill the people with emotions and as a tool used by the government to promote its legal regime.

All in all, the development of baseball in Taiwan started since the Japanese government brought baseball to Taiwan. After the 60s, with the diplomatic situation of Taiwan getting worse, the National Government which had once been recognized by the international leaders suddenly lost its backing and turned to the Taiwanese people for support and confidence, in order to rebuild its of dominion. The foundation government also manipulated heroism to build a relationship between the nation and baseball. The media exposure and nonexposure policies were also adopted to create heroic images of the players. The players' statuses and the meaning of baseball had been upgraded through event arrangements such as government officials picking up players in a grand manner, street parade, setting up a meeting with the president, or holding a banquet to honor players. Therefore, baseball is like a stimulus for the confidence of the nation in a complex age. The executive officer of the World Games 2009 in Kaoshung, Chen, said "Baseball is the sport Taiwanese people want and care the most. Let me put it this way, everyone in Taiwan knows about baseball. Baseball represents the tinv dignity we have left in the world. You probably have heard a story of people getting off beds to watch kids playing baseball (Williamsport). You may wonder what was so interesting about kids playing baseball. Even now there is nothing attractive about it. But that is what Taiwanese people need; this is why baseball and Chien-Ming Wang are so important to Taiwanese people." It is fair to say that baseball is a synonym of the national sport of Taiwan.

THE SOCIAL AND POLITICAL TURMOIL IN TAIWAN

In 2006, the Taiwanese government's accountability had been questioned for there had been scandals involving the government or the president, ugly wars between parties, exhausted economic growth, and bald media reports on domestic suicide cases. Also the cross-strait relation and foreign relations had all been in difficulty. The people had been in a tumultuous social atmosphere. At this time, Chien-Ming Wang became the most important representation of the national sport of Taiwan. Therefore, media had found a new target to write stories about. Like some humans, such as Yang, point out that "Chien-Ming Wang is the same! He is ingenuous with notbad looking and great performance, of course everyone wants to be like him. However, it does have something to do with the political atmosphere in Taiwan...".

When audience are cheering for Chien-Ming Wang's winning and sighing for his careless pitching, they have already created the most real experiences of sports life in their lives. These natural experiences are realistic and not faking. Compared with chaotic political arguments in Taiwan, audience are more likely to favor these experiences and get involved. In the recent years, the political atmosphere in Taiwan has not been good. Many people are tired of continuous fighting between the two major parties in Taiwan. The rise of Chien-Ming Wang happened to draw the spotlight. This fact seems to reflect the people's tiredness of turmoil in Taiwan.

CONSUMERS' PSYCHOLOGICAL FACTORS

In the recent years, due to factors such as political turmoil, hike in prices, and economic recession, Taiwanese have been living in a tumultuous atmosphere. In the field of the national sport of Taiwan, baseball, which is very meaningful for Taiwanese, Chien-Ming Wang had stood firm and tall with outstanding performance, more or less offering Taiwanese something to place hope on while they feel lost.

There are two comments which are written by Chien-Ming Wang's fans, Yen and Kao. Yen said "Because he is Taiwanese! ... I still have great hope for baseball in Taiwan. And in every after-game interview, Chien-Ming Wang always gives just a brief speech. His friendly attitude makes me believe that he is not conceited and arrogant though his performance is outstanding. These are the reasons why I like Chien-Ming Wang.", and Kao believed that "I hope Taiwanese people can stand tall on an international stage. I wish Taiwanese people can make a good showing in the US. Tell you the truth, when that comes true, the feeling is just great. Chien-Ming Wang is now making Taiwan well-known by standing on the greatest baseball stage in the world. His amazing performance makes me feel proud to be Taiwanese." We can discover the people of Taiwan that they hope their nation more famous and respected.

In sum, Chien-Ming Wang is much more celebrated than other athletes because of the complex and tight relation between baseball and the society in Taiwan. In the recent years in Taiwan, the society has been in straits with economic recession. The rise of Chien-Ming Wang has somehow released the people's negative emotions and he has become an emotional attachment which is accepted by consumers.

CONCLUSION

Baseball is not only the national sport of Taiwan, but also a relic from the Japanese colonial period. Chien-Ming Wang's outstanding performance in baseball has led Taiwanese people to a way out of the reduced international status, economic recession, and bad political atmosphere in 2006. Through Chien-Ming Wang, Taiwanese people have found their national confidence again and identified their values.

We can discover that a nation almost have its own representative sport in the world, and this sport also have a representative star. Based on the aforementioned, a sport star is created in the times that relate to its history and nationality and is not accidental absolutely. On the other hand, the sport star must satisfy the expect of human and become an emotional sustenance of the people. The Chien-Ming Wang's success is the best example. Moreover, advanced techniques in soft computing and artificial intelligence have been successfully applied to various fields, such as robot manipulation (Hsiao et al., 2005a, b, c, d, e; Chen et al., 2011a, b; Chen and Huang, 2011; Shih et al., 2011), engineering application (Amini and Vahdani, 2008; Chang et al., 2008; Chen, 2006; Chen et al., 2008d, e; Trabia et al., 2008; Tu et al., 2008; Yang et al., 2008a; Shih et al., 2010b; Lee et al., 2010c; Tseng et al., 2011; Tang et al., 2011), architectural engineering (Hsieh et al., 2006; Chen et al., 2004; Chen et al., 2009; Chen et al., 2010; Chen, 2010; Chen, 2011a; Chen, 2011b; Chen et al., 2011a; Chen et al., 2011b; Hsu et al., 2010; Liu et al., 2011; Lu et al., 2003; Yeh and Chen, 2010; Yeh et al., 2011), satellite observations (Lin et al., 2009a, b, 2010c), marine research (Chen et al., 2005a, b, 2006a, b, c; 2007, a, b, c, d, e, f; 2008a, b, c, 2009c, 2011a, b; Tseng et al., 2009; Chen, 2009b, network optimization (Chen and Chen, 2010b; Shih et al., 2010a, c), system development (Chen, 2009a; Chen et al., 2009a, b, d, e, f; 2010a, c, d, 2010f; Lin and Chen, 2010; Shen et al., 2011; Shih et al 2011c; Lee et al., 2011), educational improvement (Chen et al., 2010b; Shih et al., 2010d) and managements on leisure and tourism industries (Yildirim et al., 2009; Zhao et al., 2009; Tsai et al., 2008; Yang et al., 2008b; Yeh et al., 2008; Chen and Chen, 2010a; Chen et al., 2010e, g, h; Tsai and Chen, 2010; Tsai and Chen, 2011; Kuo et al., 2010; Kuo and Chen, 2011a; Kuo and Chen, 2011b; Kuo et al., 2011; Lin and Chen, 2010; Lin and Chen, 2011; Lee et al., 2010a, b; Chiang et al., 2010). Finally, this study could be easily generalized to other collective sport education. Future research should extend advanced techniques in soft computing and artificial intelligence by including other factors that may affect the extent of knowledge management. In any case, much remains to be learned regarding knowledge transfer within baseball teams, and we hope this study provides an impetus to future researchers in this area.

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REFERENCES

- Amini F, Vahdani R (2008). Fuzzy optimal control of uncertain dynamic characteristics in tall buildings subjected to seismic excitation. J. Vib. Control, 14: 1843–1867.
- Andrews LD, Jackson JS (2001). Sport star The cultural politics of sporting celebrity. Taylor & Frencis Books Ltd.
- Beck U (2000). The brave new world of work. Cambridge: Polity Press.
- Carlton JHH (1928). Essays on Nationalism. New York, The Macmillan Company.
- Chang CY, Hsu KC, Chiang KH, Huang GE (2008). Modified fuzzy variable structure control method to the crane system with control deadzone problem. J. Vib. Control, 14: 953–969.
- Chen CW (2006). Stability Conditions of Fuzzy Systems and Its Application to Structural and Mechanical Systems. Adv. Eng. Softw., 37: 624-629.
- Chen CW (2009a). Modeling and control for nonlinear structural systems via a NN-based approach. Expert Syst. Appl., 36: 4765-4772.
- Chen CW (2009b). The stability of an oceanic structure with T-S fuzzy models. Math. Comput. Simul., 80: 402-426.
- Chen CW (2010). Fuzzy control of interconnected structural systems using the fuzzy Lyapunov method. J. Vib. Control, DOI: 10.1177/1077546310379625.
- Chen CW (2010a). Modeling and fuzzy PDC control and its application to an oscillatory TLP structure. Mathematical Problems in Engineering - An Open Access J., DOI: 10.1155/2010/120403.
- Chen CW (2010b). Application of fuzzy-model-based control to nonlinear structural systems with time delay: An LMI method. J. Vib. Control, 16: 1651-1672.
- Chen CW (2011a). Modeling, control and stability analysis for timedelay TLP systems using the fuzzy Lyapunov method. Neural Comput. Appl., 20(4): 527-534.
- Chen CW (2011b). Stability analysis and robustness design of nonlinear systems: an NN-based approach. Appl. Soft Comput., 11(2): 2735-2742.
- Chen CW, Chen CY (2010b). Are educational background and gender moderator variables for leadership, satisfaction and organizational commitment. Afr. J. Bus. Manage., 4: 248-261.
- Chen CW, Chen CY, Yang HC, Chen TH (2007a). Analysis of Experimental Data on Internal Waves with Statistical Method. Eng. Comput. Int. J. Computer-Aided. Eng. Softw., 24: 116-150.
- Chen CW, Chen PC, Chiang WL (2010). Stabilization of adaptive neural network controllers for nonlinear structural systems using a singular perturbation approach. J. Vib. Control, DOI: 10.1177/1077546309352827.
- Chen CW, Chen PC. (2010b). GA-based adaptive neural network controllers for nonlinear systems. Int. J. Innov. Comput. Inf. Control, 6: 1793-1803.
- Chen CW, Chiang WL, Hsiao FH (2004). Stability Analysis of T-S Fuzzy Models for Nonlinear Multiple Time-Delay Interconnected Systems. Math. Comput. Simul., 66(6): 523-537.
- Chen CW, Chiang WL, Hsiao FH (2005a). Stability Analysis of T-S Fuzzy Models for Nonlinear Multiple Time-Delay Interconnected Systems. Math. Comput. Simul., 66: 523-537.
- Chen CW, Chiang WL, Tsai CH (2006a). Fuzzy Lyapunov Method for Stability Conditions of Nonlinear Systems. Int. J. Artif. Intell. Tools, 15: 163-171.
- Chen CW, Lin CL, Tsai CH (2007c). A Novel Delay-Dependent Criteria for Time-Delay T-S Fuzzy Systems Using Fuzzy Lyapunov Method. Int, J. Artif. Intell. Tools, 16: 545-552.
- Chen CW, Shen CW, Chen CY, Jeng MJ (2010c). Stability analysis of an oceanic structure using the Lyapunov method. Eng. Comput., 27: 186-204.

- Chen CW, Wang HL, Liu FR, Chen TH (2010f). Application of project cash management and control for infrastructure. J. Mar. Sci. Technol., 18: 644-651.
- Chen CW, Wang MHL, Lin JW (2009). Managing target the cash balance in construction firms using a fuzzy regression approach. Int. J. Uncertainty, Fuzziness Knowl.-Based Syst., 17(5): 667-684.
- Chen CW, Wang, Morris HL, Lin JW (2009e). Managing target the cash balance in construction firms using a fuzzy regression approach. International J. Uncertainty, Fuzziness, Knowl.-Based Syst., 17: 667-684.
- Chen CW, Yang, Peter HC, Chen CY, Chang AKH, Chen TH (2008b). Evaluation of inference adequacy in cumulative logistic regression models: an empirical validation of ISW-ridge relationships. China Ocean Eng., 22: 43-56.
- Chen CW, Yeh K, Chiang WL, Chen CY, Wu DJ (2007f). Modeling, H^∞ Control and Stability Analysis for Structural Systems Using Takagi-Sugeno Fuzzy Model. J. Vib. Control, 13: 1519-1534.
- Chen CW, Yeh K, Liu FR (2009d). Adaptive fuzzy sliding mode control for seismically excited bridges with lead rubber bearing isolation. Int. J. Uncertainty, Fuzziness Knowl.-Based. Syst., 17: 705-727.
- Chen CY (2010c). Using discriminant analysis to determine the breaking criterion for an ISW propagating over a ridge. Environ. Fluid. Mech., 10: 577-586.
- Chen CY (2011a). A critical review of internal wave dynamics. Part 2 Laboratory experiments and theoretical physics. J. Vib. Control, DOI: 10.1177/1077546310397561.
- Chen CY (2011b). Obstacle avoidance design for a humanoid intelligent robot with ultrasonic sensors. J. Vib. Control, DOI: 10.1177/1077546310395971.
- Chen CY, Chen CW, *Tseng IF (2007e)*. Localisd mixing due to an interfacial solitary wave breaking on seabed topography in different ridge heights. J. Offshore Mech. Arctic Eng., 129: 245-250.
- Chen CY, Hsu JRC, Chen CW, Cheng MH (2006b). Numerical model of an internal solitary wave evolution on impermeable variable seabed in a stratified two-layer fluid system. China Ocean Eng., 20: 303-313.
- Chen CY, Hsu RC, Chen CW (2005b). Fuzzy Logic Derivation of Neural Network Models with Time Delays in Subsystems. Int. J. Artif. Intell. Tools, 14: 967-974.
- Chen CY, Hsu, John RC, Chen CW (2007). Wave propagation at the interface of a two-layer fluid system in the laboratory. J. Mar. Sci. Technol., 15: 8-16.
- Chen CY, Hsu, John RC, Chen CW (2007b). Generation of internal solitary wave by gravity collapse. J. Mar. Sci. Technol., 15: 1-7.
- Chen CY, Hsu-John RC, Cheng MH, Chen CW (2008c). Experiments on mixing and dissipation in internal solitary waves over two triangular obstacles. Environ. Fluid. Mech., 8: 199-214.
- Chen CY, Huang PH (2011). Review of an autonomous humanoid robot and its mechanical control. J. Vib. Control, DOI: 10.1177/1077546310395974.
- Chen CY, Lee WI, Kuo HM, Chen CW, Chen KH (2010d). The study of a forecasting sales model for fresh food. Expert Syst. Appl., 37: 7696-7702.
- Chen CY, Lin CL, Tseng IF, Chen CW (2007d). Dynamic behavior of an internal solitary wave oscillating over variable bathymetry. Kuwait J. Sci. Eng., 34: 153-166.
- Chen CY, Lin JW, Lee WI, Chen CW (2010a). Fuzzy control for an oceanic structure: A case study in time-delay TLP system. J.Vib. Control, 16: 147-160.
- Chen CY, Liu KC, Liu YW, Huang WC (2010h). A case study of reinforced concrete short column under earthquake using experimental and theoretical investigations. Struct. Eng. Mech., 36: 197-206.
- Chen CY, Shen CW, Chen CW, Liu KFR, Jeng MJ (2009a). A Stability Criterion for Time-Delay Tension Leg Platform Systems Subjected to External Force. China Ocean Eng., 23: 49-57.
- Chen CY, Shih BY, Chou WC (2011a). The development of autonomous low cost biped mobile surveillance robot by intelligent bricks. J. Vib. Control., DOI: 10.1177/1077546310371349.
- Chen CY, Shih BY, Chou WC (2011b). The development of autonomous low cost biped mobile surveillance robot by intelligent bricks. J. Vib. Control, DOI: 10.1177/1077546310381101.

- Chen CY, Shyue SW, Chang CJ (2010g). Association rule mining for evaluation of regional environments: Case study of Dapeng Bay, Taiwan. Int. J. Innov. Comput, Inf. Control, 6: 3425-3436.
- Chen CY, Tseng IF, Yang HC, Chen CW, Chen TH (2006c). Profile Evolution and Energy Dissipation for Internal Soliton Transmitting over Different Submarine Ridges. China Ocean Eng., 20: 585-594.
- Chen CY, Yang HC, Chen CW, Chen TH (2008a). Diagnosing and revising logistic regression models: effect on internal solitary wave propagation. Eng. Comput. Int. J. Computer-Aided Eng. Softw., 25: 121-139.
- Chen CY, Yang YF, Chen CW, Chen LT, Chen TH (2010e). Linking the balanced scorecard (BSC) to business management performance: A preliminary concept of fit theory for navigation science and management. Int. J. Phys. Sci., 5: 1296-1305.
- Chen LH, Chiang CH (2003). New approach to intelligent control systems with self-exploring process. IEEE Trans. Syst. Man Cybernet. Part B: Cybernet., 33(1): 56–66.
- Chen PC, Chen CW, Chiang WL (2008d). GA-Based Fuzzy Sliding Mode Controller for Nonlinear Systems. Math. Problems Eng.- An Open Access J., DOI: 10.1155/2008/325859.
- Chen PC, Chen CW, Chiang WL (2009b). GA-based modified adaptive fuzzy sliding mode controller for nonlinear systems. Expert Syst. Appl., 36: 5872-5879.
- Chen PC, Chen CW, Chiang WL (2011b). Linear matrix inequality conditions of nonlinear systems by genetic algorithm-based adaptive fuzzy sliding mode controller. J. Vib. Control, 17(2): 163-173.
- Chen PC, Chen CW, Chiang WL, Lo DC (2011a). GA-based decoupled adaptive FSMC for nonlinear systems by a singular perturbation scheme. Neural Comput. Appl., 20(4): 517-526.
- Chen PC, Chen CW, Chiang WL, Yeh K (2009f). A novel stability condition and its application to GA-based fuzzy control for nonlinear systems with uncertainty. J. Mar. Sci. Technol., 17: 293-299.
- Chen TH, Chen CW (2010). Application of data mining to the spatial heterogeneity of foreclosed mortgages. Expert Syst. Appl., 37: 993-997.
- Chen TH, Chen CY, Yang CH, Chen CW (2008e). A Mathematical Tool for Inference in Logistic Regression with Small-Sized Data Sets – A Practical Application on ISW-Ridge Relationships. Mathematical Problems in Engineering- An Open Access J., DOI: 10.1155/2008/186372.
- Chen TH, Yang HC, Chen CY, Chen CW (2009c). Application of Logistic Regression Model: Propagation Effect on Internal Soliton. J. Chung. Cheng. Inst. Technol., 37: 1-10.
- Chiang WL, Chiou DJ, Tang JP, Hsu WK, Liu TY (2010). Detecting the sensitivity of structural damage based on the Hilbert-Huang transform approach. Eng. Comput., 27: 799-818.
- Hsiao FH, Chen CW, Liang YW, Xu SD, Chiang WL (2005e). T-S Fuzzy Controllers for Nonlinear Interconnected Systems with Multiple Time Delays. IEEE Trans. Circuits Systems-I : Regular Pap., 52: 1883-1893.
- Hsiao FH, Chen CW, Wu YH, Chiang WL (2005a). Fuzzy Controllers for Nonlinear Interconnected TMD Systems with External Force. J. Chinese Institute. Eng., 28: 175-181.
- Hsiao FH, Chiang WL, Chen CW (2005d). Fuzzy Control for Nonlinear Systems via Neural-Network-Based Approach. Int. J. Comput. Methods Eng. Sci. Mech., 6: 145-152.
- Hsiao FH, Chiang WL, Chen CW, Xu SD, Wu SL (2005c). Application and Robustness Design of Fuzzy Controller for Resonant and Chaotic Systems with External Disturbance. Int. J. Uncertainty, Fuzziness Knowl.-Based Syst., 13: 281-295.
- Hsiao FH, Hwang JD, Chen CW, Tsai ZR (2005b). Robust Stabilization of Nonlinear Multiple Time-Delay Large-scale Systems via Decentralized Fuzzy Control. IEEE Trans. Fuzzy Syst., 13: 152- 163.
- Hsieh TY, Wang MHL, Chen CW (2006). A New Viewpoint of S-Curve Regression Model and its Application to Construction Management. Int. J. Artif. Intell. Tools, 15: 131-142.
- Hsu WK, Huang PC, Chen CW, Chang CC, Hung DM, Chiang WL (2010). A flood risk assessment model for Taiwan. Nat. Hazards, DOI 10.1007/s11069-011-9732-9.
- Katz D (1994). Just do it: the Nike spirit in the corporate world. Holbrook, MA: Adams Publishing.

- Klapper J (1969). Statement Before the National Commission on the Causes and Prevention of Violence. Washington D.C: Government Printing Office.
- Kuo HM, Chen CW (2011a). Application of quality function deployment to improve the quality of Internet shopping website interface design. Int. J. Innov. Comput. Inf. Control, 7(1): 253-268.
- Kuo HM, Chen CW (2011b). A novel viewpoint of information and interface design for auction website. Hum. Factors Ergonom. Manuf. Serv. Ind., DOI: 10.1002/hfm.20274.
- Kuo HM, Chen CW, Chen CW (2010). A behavioral model of the elderly Internet consumer: a case study. Int. J. Innov. Comput. Inf. Control, 6(8): 3507-3518.
- Kuo HM, Chen CW, Chen CW (2011). A study of merchandise information and interface design on B2C websites. J. Mar. Sci. Technol., 19(1): 15-25.
- Kuper S (2003). Ajax, the Dutch, the war: Football in Europe during the Second World War. London: Orion.
- Lee WI, Chen CW, Chen TH, Chen CY (2010a). The relationship between consumer orientation, service value, medical care service quality and patient satisfaction: The case of a medical center in Southern Taiwan. Afr. J. Bus. Manage., 4: 448-458.
- Lee WI, Chen CW, Wu CH (2010b). Relationship between quality of medical treatment and customer satisfaction - A case study in dental clinic association. Int. J. Innov. Comput. Inf. Control, 6: 1805-1822.
- Lee WI, Chen CY, Kuo HM, Sui YC (2010c). The development of halfcircle fuzzy numbers and application in fuzzy control. J. Vib. Control, 16(13): 1977-1987, DOI: 10.1177/1077546309349849.
- Lee WI, Chiu YT, Liu CC, Chen CY (2011). Assessing the effects of consumer involvement and service quality in a self-service setting. Hum. Factors Ergonom. Manuf. Serv. Ind., DOI: 10.1002/hfm.20253.
- Liao CH, Lo YH (2005). The social function of Sports hero: Interpretaion from the perspective of Media. J. Phys. Educ. Higher Educ., 94: 2-6.
- Lin CL, Wang JF, Chen CY, Chen CW, Yen CW (2009b). Improving the generalization performance of RBF neural networks using a linear regression technique. Expert Syst. Appl., 36: 12049-12053.
- Lin HS, Xiao J, Michalewicz Z (1994). Evolutionary algorithm for path planning in mobile robot environment. In Proc. First IEEE Conf. Evol. Comput. (ICEC '94), Piscataway, NJ, IEEE, pp. 211–216.
- Lin ML, Chen CW (2010). Application of fuzzy models for the monitoring of ecologically sensitive ecosystems in a dynamic semi-arid landscape from satellite imagery. Eng. Comput., 27: 5-19.
- Lin ML, Chen CW (2010). Stability analysis of community and ecosystem hierarchies using the Lyapunov method. J. Vib. Control, DOI: 10.1177/1077546310385737.
- Lin ML, Chen CW (2011). Using GIS-based spatial geocomputation from remotely sensed data for drought risk-sensitive assessment. Int. J. Innov. Comput. Inf. Control, 7(2): 657-668.
- Lin ML, Chen CW, Wang QB, Cao Y (2009a). Fuzzy model-based assessment and monitoring of desertification using MODIS satellite imagery. Eng. Comput., 26: 745-760.
- Lin QW (1995). Sports and maintain political power: Interpretation of the post-war history of baseball in Taiwan. National Taiwan University thesis.
- Liu TY, Chiang WL, Chen CW, Hsu WK, Lu LC, Chu TJ (2011). Identification and monitoring of bridge health from ambient vibration data. J. Vib. Control, 17(4): 589-603.
- Lu LT, Chiang WL, Tang JP, Liu MY, Chen CW (2003). Active Control for a Benchmark Building Under Wind Excitations. J. Wind Eng. Ind. Aerodyn., 91(4): 469-493.
- Shen CW, Cheng MJ, Chen CW, Tsai FM, Cheng YC (2011). A fuzzy AHP-based fault diagnosis for semiconductor lithography process. Int. J. Innov. Comput. Inf. Control, 7(2): 805-816.
- Shih BY, Chang CJ, Chen AW, Chen CY (2010c). Enhanced MAC Channel Selection to Improve Performance of IEEE 802.15.4. Int. J. Innov. Comput., Inf. Control, 6: 5511-5526.
- Shih BY, Chen CY, Chou WC (2011). Obstacle avoidance using a path correction method for autonomous control of a biped intelligent robot. J. Vib. Control, DOI: 10.1177/1077546310372004.
- Shih BY, Chen CY, Li CE (2010d). The exploration of mobile mandarin learning system by the application of TRIZ theory. Comput. Appl. Eng. Educ., DOI : 10.1002/cae.20478.
- Shih BY, Chen CY, Shih CH, Tseng JY (2010a). The development of

enhancing mechanisms for improving the performance of IEEE 802.15.4. Int. J. Phys. Sci., 5: 884-897.

- Shih CH, Wakabayashi N, Yamamura S, Chen CY (2011c). A context model with a time-dependent multi-layer exception handling policy. Int. J. Innov. Comput. Inf. Control, 7(5A): 2225-2234.
- Shih CH, Yamamura S, Chen CY (2010b). Analysis of control structure for turning maneuvers. Math. Probl. Eng., 2010, DOI:10.1155/2010/481438.
- Smart B (2007). Not playing around: global capitalism, modern sport and consumer culture. Global Networks-A J. Trans. Affairs, 7(2): 113-134.
- Tang JP, Chiou DJ, Chen CW, Chiang WL, Hsu WK, Chen CY, Liu TY (2011). A case study of damage detection in benchmark buildings using a Hilbert-Huang Transform-based method. J. Vib. Control, 17(4): 623-636.
- Trabia MB, Renno JM, Moustafa KAF (2008). Generalized design of an anti-swing fuzzy logic controller for an overhead crane with hoist. J. Vib. Control, 14: 319–346.
- Tsai CH, Chen CW (2010). An earthquake disaster management mechanism based on risk assessment information for the tourism industry-A case study from the island of Taiwan. Tourism Manage., 31(4): 470-481.
- Tsai CH, Chen CW (2011). The establishment of a rapid natural disaster risk assessment model for the tourism industry. Tourism Manage., 32(1): 158-171.
- Tsai CH, Chen CW, Chiang WL, Lin ML (2008). Application of Geographic Information System to the Allocation of Disaster Shelters via Fuzzy Models. Eng. Comput. — Int. J. Computer-Aided. Eng. Softw., 25: 86-100.
- Tsai CH, Lee JS, Chuang JH (2001). Path planning of 3-D objects using a new workspace model. IEEE Trans. Syst. Man Cybernet. – Part C: Appl. Rev., 31(3): 405–410.
- Tseng CP, Chen CW, Liu FR (2011). Risk control allocation model for pressure vessels and piping project. J. Vib. Control, DOI: 10.1177/1077546311403182.
- Tseng IF, Chen CY, Kuo HM (2009). Nonlinear internal wave run-up on impermeable steep slopes. J. Offshore Mech. Arctic Eng., ASME, 131(4): doi:10.1115/1.3168528.
- Tu JW, Qu WL, Chen J (2008). An experimental study on semi-active seismic response control of a large-span building on top of ship lift towers. J. Vib. Control, 14: 1055–1074.
- Yang CH, Chen TH, Chen CW, Chen CY, Liu CT (2008b). Accuracy evaluation of a diagnostic test by detecting outliers and influential observations. China. Ocean Eng., 22: 421-429.
- Yang HC, Chen CY, Chen CW, Chen TH (2008a). Estimation on internal wave reflection in a two-layer fluid system by cumulative logistic regression model. J. Mar. Sci. Technol., 16: 44-51.
- Yeh K, Chen CW (2010). Stability analysis of interconnected fuzzy systems using the fuzzy Lyapunov method. Mathematical Problems in Eng. - An Open Access J. 2010, p. 10. Doi: 10.1155/2010/734340.
- Yeh K, Chen CW, Lo DC (2011). Neural-network fuzzy control for chaotic tuned mass damper systems with time delays. J. Vib. Control, DOI: 10.1177/1077546311407538.
- Yeh K, Chen CY, Chen CW (2008). Robustness Design of Time-Delay Fuzzy Systems Using Fuzzy Lyapunov Method. Appl. Math. Comput., 205: 568-577.
- Yildirim S, Erkaya S, Eski I, Uzmay I (2009). Noise and vibration analysis of car engines using proposed neural network. J. Vib. Control, 15: 133–156.
- Zhao FG, Chen J, Guo L, Li X (2009). Neuro-fuzzy based condition prediction of bearing health. J. Vibrat. Control, 15: 1079–1091.